MANUAL

VALLOX

MyVallox
Control

Vallox 096 MV
Vallox 110 MV
Vallox 145 MV

Models
Vallox 096 MV
Vallox 110 MV
Vallox 145 MV

Types
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3702
3712

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ANNUAL EFFICIENCY RATING OF EXTRACT AIR HEAT RECOVERY
A+

Manual

Vallox 096 MV Vallox 110 MV Vallox 145 MV

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NOTE:
You can find your MyVallox account at www.MyVallox.com

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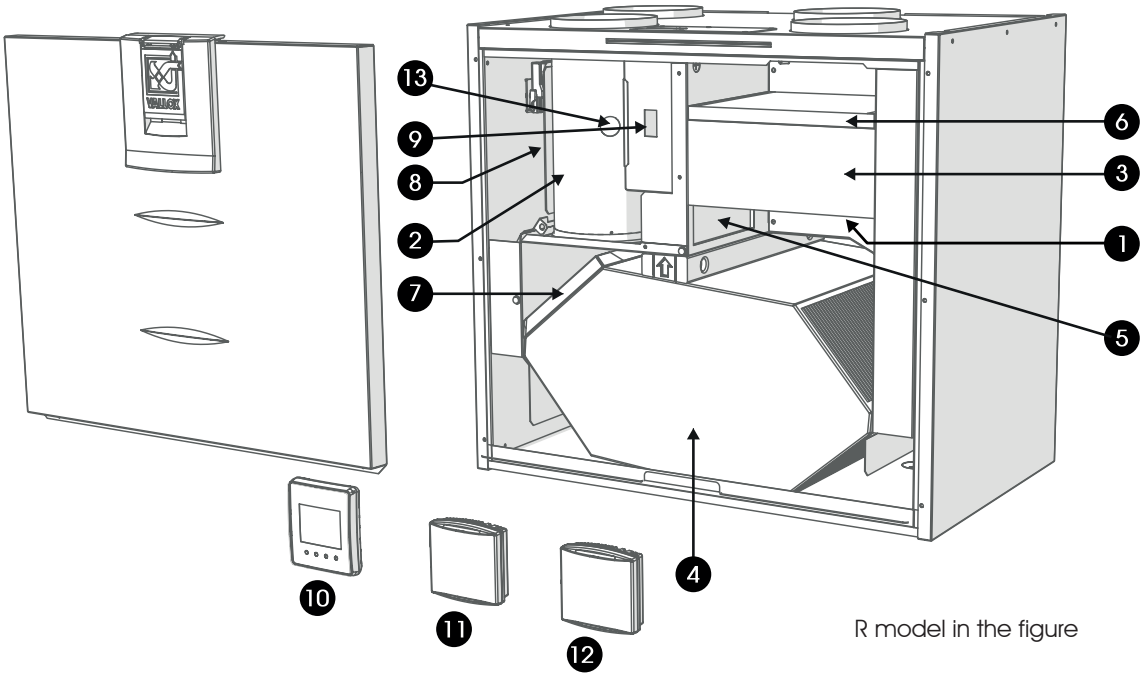
THE MAIN PARTS OF THE VENTILATION UNIT



R model in the figure

- EXTRACT AIR FAN (BEHIND THE PROTECTIVE COVER) 1
- SUPPLY AIR FAN (BEHIND THE EXTRACT AIR DUCT) 2
- OUTDOOR AIR FILTER F7 3
- HEAT RECOVERY CELL 4
- SUMMER / WINTER FLAP 5
- OUTDOOR AIR FILTER G4 6
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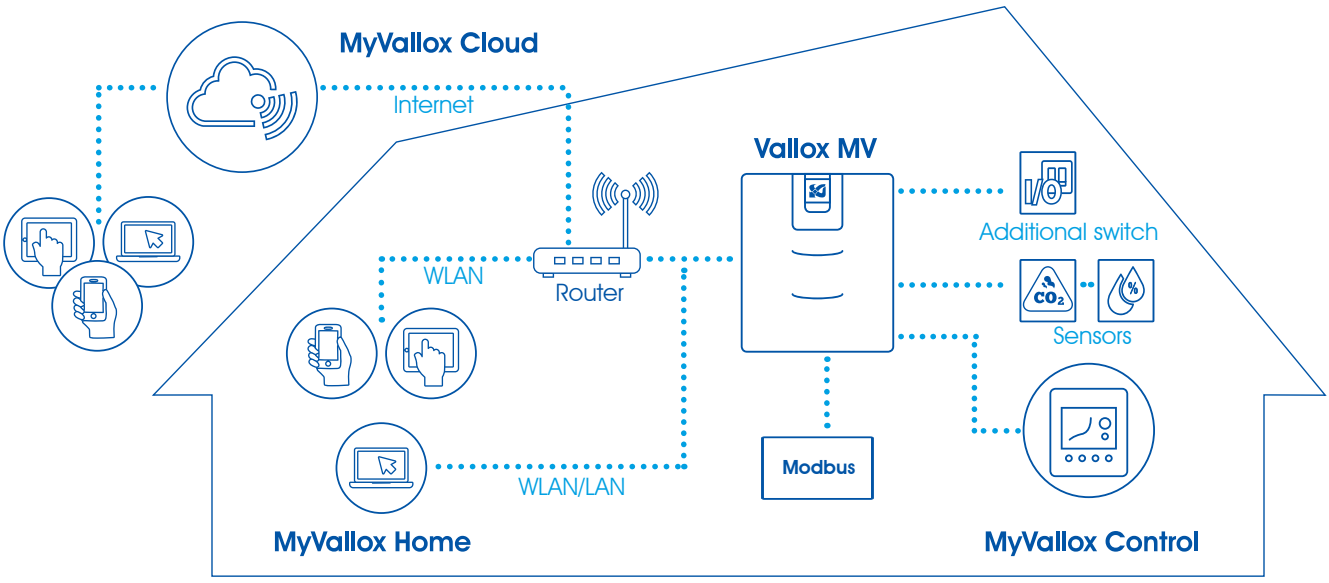
SYSTEM DESCRIPTION



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DIFFERENCES BETWEEN THE UNITS

- Power
- Size
- Vallox 096 MV does not have an additional heater. Vallox 110 MV and Vallox 145 MV have an additional heater.
- Weight
- In the model Vallox 096 MV, there is a sealing tape at the bottom of the heat recovery cell. In other models, there is a separate sealing bar under the heat recovery cell.
- Standard delivery options vary from country to country.
- The available options vary from country to country.

Mounting options:

- Models Vallox 096 MV and Vallox 110 MV can be mounted either on the wall, or on the ceiling by using a mounting plate (optional). These models cannot be mounted on the floor.
- Model Vallox 145 MV can be mounted either on the wall, or on the floor by using a floor rack (optional). This model cannot be mounted on the ceiling.

IMPORTANT

If necessary, you can find more information at www.vallox.com

GENERAL SAFETY INSTRUCTIONS

For safe and proper handling, it is necessary to know the basic safety regulations and the intended usage of the ventilation system. Read this manual before operating the ventilation unit. Keep this manual for later use. In case of loss, you can download the manual from our website.
This user manual contains all important hints for operating the system safely. This user manual must be observed by all persons who operate and maintain the ventilation system. Furthermore, observe all local accident prevention regulations.

INTENDED USE

All Vallox ventilation units are designed to take care of appropriate and continuous ventilation, in such a way that people and structures will remain healthy.

GUARANTEE AND LIABILITY

Demands on guarantee and liability are excluded if they are caused by the following reasons:

- Unintended use of the ventilation system and the control unit
- Improper mounting, initial operation and operation
- Operating the ventilation system with a defective safety system
- Ignoring hints for transportation, mounting, operation and maintenance
- Unauthorized structural alteration and changes of the programming
- Disasters due to extraneous elements and force majeure

INSTALLATION

Installation and setup should only be carried out by qualified experts. Electrical installations and connections must only be carried out by electricians, and according to the local regulations.

CONTROL PANEL BUTTONS

BUTTON	DESCRIPTION
	Change profile button. This button allows you to change the ventilation profile of the device.
	Profile Information button. This button allows you to view the currently active profile information.
°C	**Temperature** button. Pressing this button displays information on temperatures and sensors.
	Settings button. Press this button to open the settings.
	Back button. Pressing this button takes you backwards in the menu.
	Left arrow button. Pressing this button takes you to the left in the menu.
	Right arrow button. Pressing this button takes you to the right in the menu.
	OK button. Press this button to accept the selected option.
	Select button. Press this button to select an option from the list.
	Edit button. Press this button to edit settings.
+	**Plus** button. Press this button to: • Increase the value of the setting. • Move to the next menu item. • Move from a one-day view to a week view in the temperature, humidity and carbon dioxide graphs.
−	**Minus** button. Press this button to: • Reduce the value of the setting. • Return to the previous menu item. • Move from a week view to a one-day view in the temperature, humidity and carbon dioxide graphs.
	Up arrow button. Pressing this button takes you upwards in the menu.
	Down arrow button. Pressing this button takes you downwards in the menu.
	Statistics button. This button opens the temperature, humidity and carbon dioxide graphs (1 day / week).
	These icons indicate the settings hierarchy level.
	This icon indicates that the feature is disabled at your user level. The parental controls lock code is 1001.

MyVallox Control

NOTE

The MyVallox Control control panel contains the buttons described in the following table. You can press the graphical user interface buttons by using the ring shaped physical buttons below the control panel screen. The system does not have a touch screen.

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INTRODUCTION

Ventilation has to be constant for the indoor air to stay healthy for the dwellers and the structures of the dwelling. Even for longer holidays, it is not advisable to stop the ventilation, because the indoor air will become stuffy and, during the heating season, the indoor air humidity may condense in the ventilation ductwork and structures, causing moisture damage.

You can control and automate the Vallox ventilation unit operation in the following ways:

- By using a control panel installed in the building
- Through the My Vallox Home local network connection and the Web interface
- Through the My Vallox Cloud cloud service and the Web interface
- Through a remote monitoring service or building automation by using voltage signals or Modbus messages

The required ventilation may also be adjusted automatically with the optional carbon dioxide and humidity sensors. In this case, ventilation remains optimal even if the dwelling is unoccupied. By using the week clock, you can create just the right ventilation for your individual lifestyle.

WARNING

The unit is not intended for use by children (under 8 years) or by persons with reduced sensory, physical, or mental capabilities, or lack of knowledge and experience, that limit the safe operation of the unit.

These people can use the product under the supervision of a person responsible for their safety, or as directed.

TIP

The MyVallox Control control panel automatically switches to sleep mode when the pre-set sleep time has elapsed. If you want to wake up the MyVallox Control control panel, press any button on the control panel.

INTRODUCTION

The ventilation specialist has made the ventilation system basic settings, based on the ventilation plan. The basic settings are:

- User interface language.
- Time and date.
- System administrator password. The installer has given you the system administrator password.
- Possible parental controls.
- Fan settings.
- User profile settings, such as the temperature.

If you are satisfied with the basic settings made by the installer, do not make changes to them.

STARTING THE UNIT

If you are starting the ventilation unit for the first time, or after any maintenance procedure, connect the plug to the outlet, starting the unit. When the unit starts up, the diagnostic display will appear for a few seconds, until the At home profile main screen is opened.

If the unit is switched off from the control panel, you can start the ventilation unit by pressing any button on the control panel.

NOTE

The first launch of the unit may take a while, as the control panel will format its software and verify that it has the latest software version.

SWITCHING THE UNIT OFF

If you want to switch off the ventilation unit, proceed as follows:

1. Select **Settings** > Turn unit OFF.
2. Press the **OK** button.
3. The system asks for confirmation.
4. Press the **OK** button.
5. The ventilation unit is now switched off.

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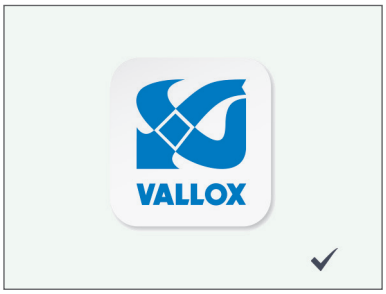
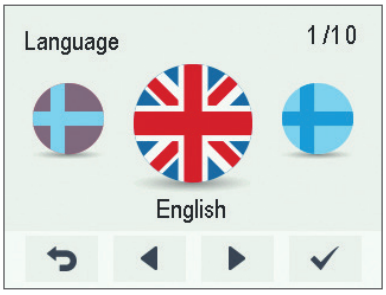
DEPLOYMENT WIZARD



1. Start the Vallox ventilation device by plugging in the power cord to the power outlet.
2. When you start the Vallox ventilation device for the first time, the Vallox logo is shown on the MyVallox Control control panel.
3. Press the **OK** button.
4. The deployment wizard is launched.

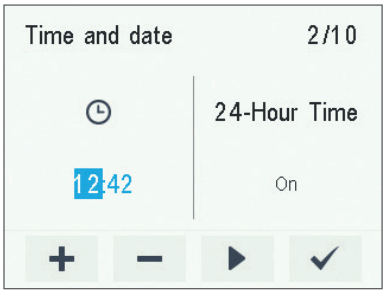
SELECTING THE LANGUAGE



Select the user interface language as follows:

1. Use the arrow buttons to select the language you want, for example, English:
2. Press the **OK** button.
3. The selected language is now English.

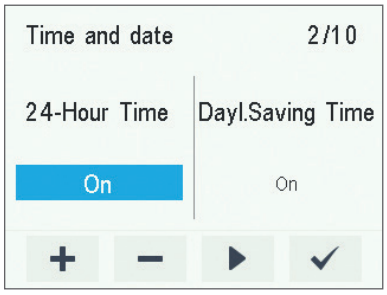
SET THE TIME



When the deployment wizard prompts you to set the date and time, the Time and date screen is opened first:

1. Use the **Plus** and **Minus** buttons to set the hours.
2. Press the **Right arrow** button.
3. Use the **Plus** and **Minus** buttons to set the minutes.
4. The time is now set.
5. Proceed to the next phase by pressing the **Right arrow** button.

SET THE 24 OR 12 HOUR CLOCK



By default, the system uses a 24 hour clock.

If you want to use the 24 hour clock, proceed to the next step by pressing the Arrow right button.

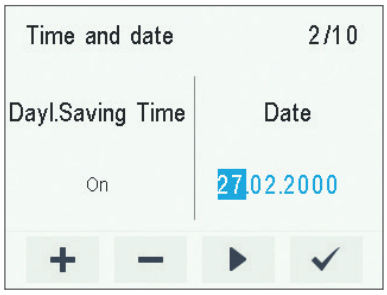
If you want to use the 12 hour clock, proceed as follows:

1. Press the **Minus** button. The **24-Hour Time** setting value is changed to **Off**.
2. Proceed to the next phase by pressing the **Right arrow** button.

BASIC SETTINGS

Vallox 145 MV Vallox 110 MV Vallox 096 MV

SET THE AUTOMATIC DAYLIGHT SAVING TIME

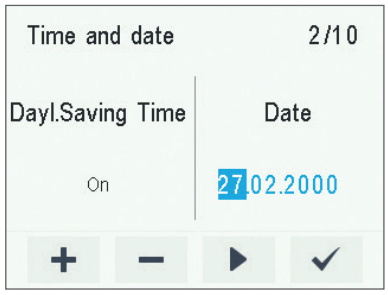


By default, the system automatically switches to the summer time.

If you want to use the automatic daylight saving time, proceed to the next step by pressing the Arrow right button. If you want to use the manual daylight saving time, proceed as follows:

1. Press the **Minus** button. The Dayl.Saving Time setting value is changed to Off.
2. Manual daylight saving time is now set.
3. Proceed to the next phase by pressing the **Right arrow** button.

SET THE DATE



1. Use the **Plus** and **Minus** buttons to set the date.
2. Press the **Right arrow** button.
3. Use the **Plus** and **Minus** buttons to set the month.
4. Press the **Right arrow** button.
5. Use the **Plus** and **Minus** buttons to set the year.
6. Press the **OK** button:
7. The date is now set.

FINISHING UP THE DEPLOYMENT

When you have made the basic settings for the deployment, the acknowledgement screen is opened.

If you want to continue and make the advanced settings for the ventilation device, press the OK button.

If you want to intermit the deployment and use the ventilation device on factory settings, press the Back button: You can make the expert settings for the ventilation device later.

EXPERT SETTINGS

The following chapters describe the Vallox ventilation device deployment wizard phase, where you make the expert settings.

IMPORTANT

Some deployment phases require special equipment, such as an air flow meter.

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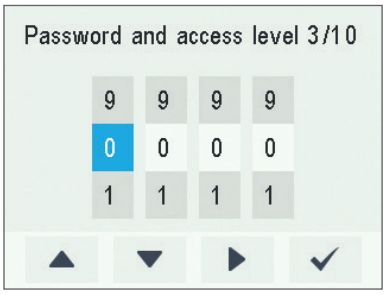
PASSWORD AND ACCESS LEVEL

Once you have finished up making the basic settings, the deployment wizard moves on to setting the system password.

NOTE
If you set the password as 0000, the password inquiry is not used.

1. The deployment wizard Password and access level screen is opened.
2. Set the first digit of the password by using the Up arrow and Down arrow buttons. Proceed to the next digit by pressing the **Right arrow** button.
3. Set the second, third and fourth digit in the same manner as the first digit.
4. Press the **OK** button.
5. The password is now set.



WRITE DOWN THE PASSWORD YOU SET:

____ ____ ____ ____

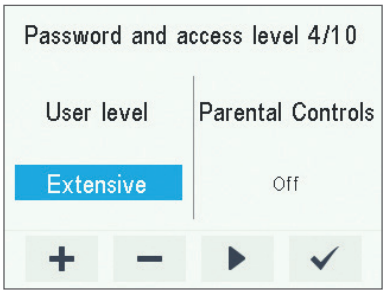
USER LEVEL

There are three user levels:

- **Extensive** — On the extensive user level, the user can access every menu on the control panel..
- **Normal** — On the normal user level, the user's access to some menus is restricted.
- **Limited** — The users on the limited user level can only carry out the basic tasks required to operate the ventilation device.

For more information on user levels, see chapter 9, User level diagrams.

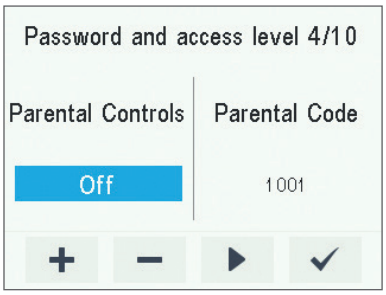
When you want to set the system user level, proceed as follows:
1. The deployment wizard User level screen is opened.
2. Use the **Plus** and **Minus** buttons to set the user level.
3. Press the **Right arrow** button.
4. The user level is now set.



PARENTAL CONTROLS

Parental controls lock the control panel screen in a way that no one can damage the ventilation unit by pressing the control panel buttons randomly.

When you want to set the system child lock, proceed as follows:
1. The deployment wizard Password and access level screen is opened.
2. Set the parental controls on or off by using the **Plus** and **Minus** buttons.
3. Press the **OK** button.
4. The parental controls are now set.



PARENTAL CONTROLS ACCESS CODE:

1 0 0 1

FAN SETTINGS

In the following chapters, you will set the output ratio between the supply and extract air fans.

IMPORTANT

Adjust the air flows, according to the values in the ventilation plan. Try to adjust the air flows in a way that you do not have to choke the air flows at the valves. This is the most energy efficient set up.

First, set both values as close to the ideal value as possible. The ideal values are presented in the supply and extract air volume graphs. If, at the beginning, the air flows differ greatly from each other, the ventilation unit may have to carry out extra defrosting cycles on sub-zero temperatures, thus complicating the adjustment of the air flows. Check the air flows by measuring them at the valves, and fine tune the percentage values, if necessary.

NOTE

If the outside air is extremely cold (below -10°C on an aluminium cell or below -3°C on a plastic cell), the ventilation device may have to defrost the heat exchanger cell. If this occurs, you cannot adjust the air flows and the Defrosting figure is shown on the control panel.

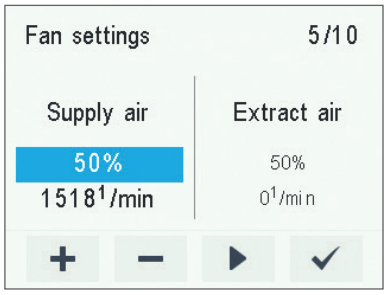
WARNING

The ventilation specialist has made the supply and exhaust air settings when deploying the Vallox ventilation unit. If you make changes to the settings, ensure that they conform with the ventilation plan.

SUPPLY AIR

When you want to make the system supply air settings, proceed as follows:

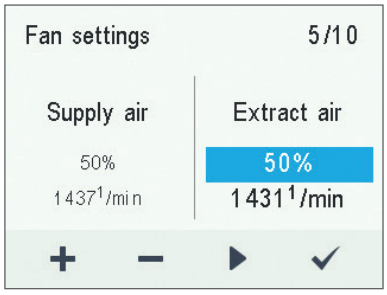
1. The deployment wizard Fan settings screen is opened.
2. Set the supply air quantity as a percentage of the maximum by using the **Plus** and **Minus** buttons. The fan speed (1/min) will change, according to the percentage value.
3. Once you have set the supply air fan settings, press the **Right arrow** button.



EXTRACT AIR

When you want to make the system extract air settings, proceed as follows:

1. The deployment wizard Fan settings screen is opened.
2. Set the extract air quantity as a percentage of the maximum by using the **Plus** and **Minus** buttons. The fan speed (1/min) will change, according to the percentage value.
3. Press the **OK** button.
4. The extract air fan ratio is now set.



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PROFILE SETTINGS

In the following chapters, you can make ventilation settings for the system profiles.

HOME PROFILE

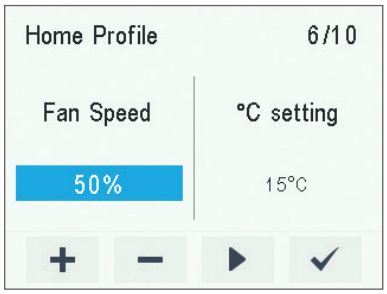
When you want to make the At home profile settings, proceed as follows:

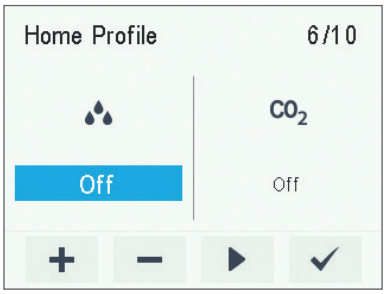
1. The deployment wizard Home screen will open.

NOTE

Once you have set the basic ventilation air flow rates, the higher percentage value will default to the At home profile fan speed value. We recommend this basic amount of ventilation for the At home profile setting. If necessary, you can change it.

2. Set the **At home** profile fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.
3. The At home profile fan speed value is now set.
4. Press the **Right arrow** button.
5. The temperature setup screen is opened.
6. Set the desired supply air temperature for the **At home** profile by using the **Plus** and **Minus** buttons. You can adjust the temperature in the range of +10°C – +25°C.
7. The At home profile supply air temperature is now set.
8. Press the **Right arrow** button.
9. The setup screen for the automatic fan speed control, based on the relative humidity, appears.
10. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the relative humidity, is used or not.
11. The automatic fan speed control, based on the relative humidity, is now set.
12. Press the **Right arrow** button.
13. The setup screen for the automatic fan speed control, based on the carbon dioxide content, appears.
14. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the carbon dioxide content, is used or not.
15. The automatic fan speed control, based on the carbon dioxide content, is now set.
16. Press the **OK** button.





AWAY PROFILE

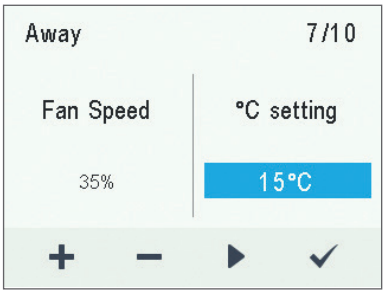
When you want to make the Away profile settings, proceed as follows:

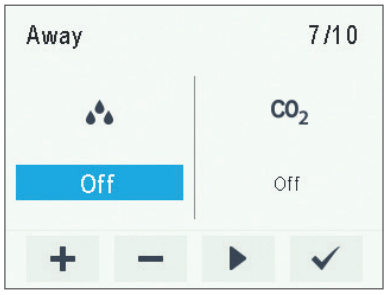
1. The deployment wizard Away profile screen is opened.

NOTE

Once you have set the fan speed for the At home profile, the fan speed for the Away profile will default to -30% of the At home profile fan speed. We recommend this basic amount of ventilation for the Away profile setting. If necessary, you can change it.

2. Set the **Away** profile fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.
3. The Away profile fan speed value is now set.
4. Press the **Right arrow** button.
5. The temperature setup screen is opened.
6. Set the desired supply air temperature for the Away profile by using the **Plus** and **Minus** buttons. You can adjust the temperature in the range of +10°C – +25°C.
7. The Away profile supply air temperature is now set.
8. Press the **Right arrow** button.
9. The setup screen for automatic fan speed control, based on the relative humidity, appears.
10. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the relative humidity, is used or not.
11. The automatic fan speed control, based on the relative humidity, is now set.
12. Press the **Right arrow** button.
13. The setup screen for the automatic fan speed control, based on the carbon dioxide content, appears.
14. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the carbon dioxide content, is used or not.
15. The automatic fan speed control, based on the carbon dioxide content, is now set.
16. Press the **OK** button.





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BOOST PROFILE

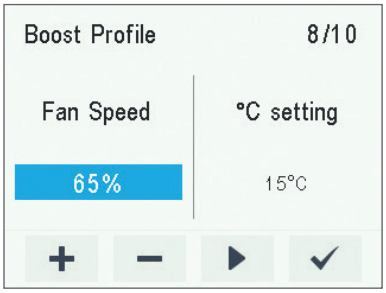
When you want to make the Boost profile settings, proceed as follows:

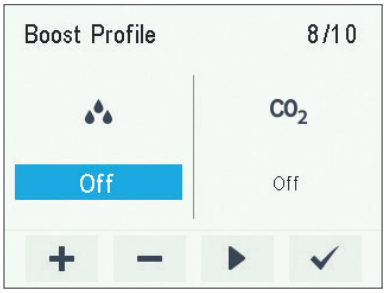
1. The deployment wizard **Boost** profile screen is opened.

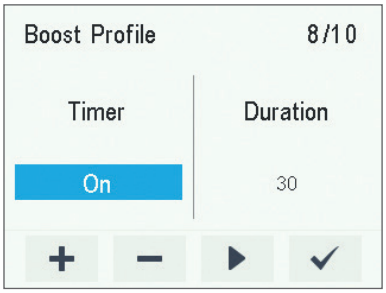
NOTE

Once you have set the fan speed for the At home profile, the fan speed for the Boost profile will default to +30% of the At home profile fan speed. We recommend this basic amount of ventilation for the Boost profile setting. If necessary, you can change it.

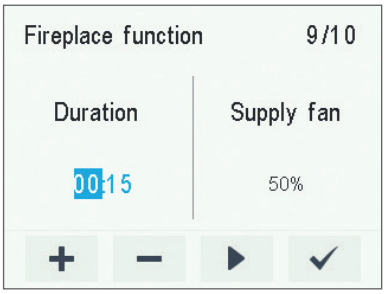
2. Set the **Boost** profile fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.
3. Press the **Right arrow** button.
4. The temperature setup screen is opened.
5. Set the desired supply air temperature for the **Boost** profile by using the **Plus** and **Minus** buttons. You can adjust the temperature in the range of +10°C – +25°C.
6. Press the **Right arrow** button.
7. The setup screen for the automatic fan speed control, based on the relative humidity, appears.
8. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the relative humidity, is used or not.
9. Press the **Right arrow** button.
10. The setup screen for the automatic fan speed control, based on the carbon dioxide content, appears.
11. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the carbon dioxide content, is used or not.
12. Press the **Right arrow** button.
13. The profile timer setting screen is displayed.
14. Use the **Plus** and **Minus** buttons to select whether the profile timer function is enabled or not. The options are:
    - **On** - When the timer is enabled, the **Boost** profile is only on for the period defined in the timer.
    - **Off** — When the timer is disabled, the **Boost** profile is used until you (or the week clock) change the profile.
15. Press the **Right arrow** button.
16. The timer duration setting screen appears.
17. Set the profile timer duration in minutes by using the **Plus** and **Minus** buttons.
18. Press the **OK** button.







FIREPLACE PROFILE

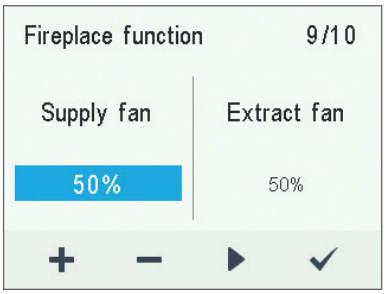


When you want to make the Fireplace function settings, proceed as follows:

1. The deployment wizard **Fireplace function** profile screen is opened.
2. Set the profile timer duration in minutes by using the **Plus** and **Minus** buttons.
3. The profile duration is now set.
4. Press the **Right arrow** button.
5. The screen for setting the profile supply air fan speed appears.
6. Set the **Fireplace function** supply air fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.

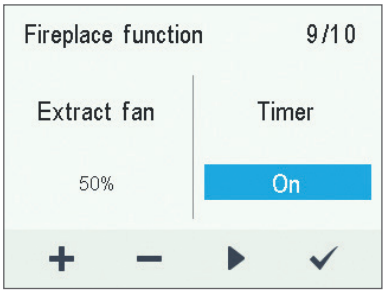
TIP

In the fireplace mode, we recommend that you increase the supply air fan speed, in order to obtain a positive pressure at the ventilation zone. We do not recommend reducing the extract air fan speed.



7. The **Fireplace function** supply air fan speed is now set.
8. Press the **Right arrow** button.
9. The screen for setting the profile extract air fan speed appears.
10. Set the **Fireplace function** extract air fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.

11. The **Fireplace function** extract air fan speed is now set.
12. Press the **Right arrow** button.
13. The profile timer setting screen is displayed.
14. Use the **Plus** and **Minus** buttons to select whether the profile timer function is enabled or not. The options are:
    - **On** — When the timer is enabled, the **Fireplace function** is only on for the period defined in the timer.
    - **Off** — When the timer is disabled, the **Fireplace function** is used until you (or the week clock) change the profile.
15. The profile timer function is now set.
16. Press the **OK** button.
17. The **Fireplace function** settings are now complete.



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FINISHING UP

When you have completed the wizard, the Setup done! screen will open.

Finish up the deployment, as follows:

1. If you want to go back to repair or change a value, use the arrow buttons to select the desired line and press the **OK** button.
2. Repeat the selected deployment phase or phases, until you are satisfied with the settings.
3. When you are satisfied with the settings, use the arrow buttons to select Start and press the **OK** button.

VENTILATION PROFILES

Vallox 145 MV Vallox 110 MV Vallox 096 MV

THE VALLOX VENTILATION UNIT HAS FOUR VENTILATION PROFILES:

AT HOME

Use this ventilation profile when the apartment or the premises are occupied

AWAY

Use this ventilation profile when the dwelling or premises are not occupied, for example, during a trip or other long absence.

BOOST

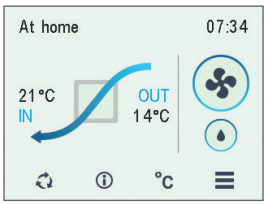
Use this profile when there are a lot of people in the apartment or on the premises, or when you want to enhance the ventilation for other reasons.

FIREPLACE FUNCTION

Use this ventilation profile when, for example, you are making a fire in the fireplace. This profile is, primarily, used to create a momentary overpressure in the housing.

VENTILATION PROFILE USER INTERFACE SYMBOLS

The profile main screens use the following symbols: Table 2. Profile symbols



Example of a profile main screen

SYMBOL	DESCRIPTION
	When this symbol appears on the screen, either the Home, Away or Boost profile is in use. The week clock is not used.
	When this symbol appears on the screen, either the Home, Away or Boost profile is in use. The week clock is used.
	When this symbol appears on the screen, the Fireplace profile is in use. The week clock is possibly used.
	These symbols indicate the fan speed of the currently active profile. The smallest fan icon indicates that the Away profile is in use, and largest fan icon, in turn, indicates that the Boost profile is used.
	Drop symbols indicate the relative amount of moisture in the air. The symbols are: • One drop — A humidity sensor is installed and the humidity level is normal. • Two drops — The humidity level is slightly elevated. The fan speed is increased, if automatic adjustment is allowed. • Three drops — The humidity level is remarkably elevated. The fan speed is increased, if automatic adjustment is allowed.
CO_2 CO_2 CO_2	These symbols indicate the carbon dioxide concentration in the air. The colour codes are: • Green — A carbon dioxide sensor is installed and the carbon dioxide level is normal. • Orange — The carbon dioxide level is slightly elevated. The fan speed is increased, if automatic adjustment is allowed. • Red — The carbon dioxide level is remarkably elevated. The fan speed is increased, if automatic adjustment is allowed.

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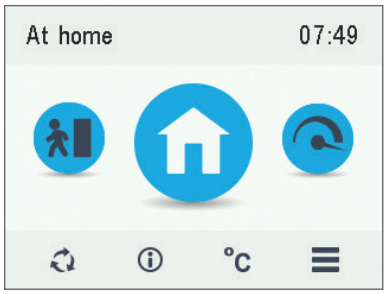
CHANGING THE PROFILE

If you want to change the ventilation profile, proceed as follows:

1. Press the **Change profile** button until the desired ventilation profile icon is displayed in the screen.
2. Wait until the ventilation profile main screen is displayed.
3. The ventilation profile has been changed.

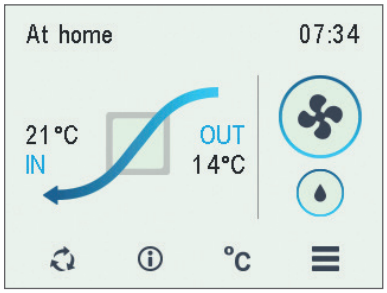
VIEWING VENTILATION PROFILE INFORMATION

VIEWING THE AT HOME PROFILE INFORMATION



If you want to view the At home profile settings, proceed as follows:

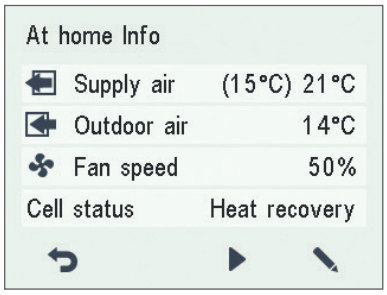
1. Open the **At home** profile main view.
2. Press the Profile information button.
3. The first information screen for the profile appears.



This screen contains the following information:

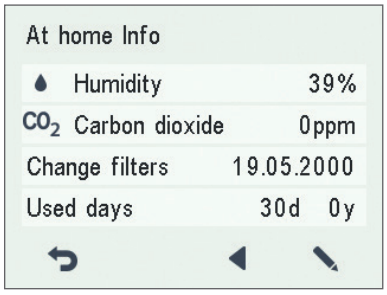
- **Supply air** — This value indicates the temperature of the air blown indoors and its set value (in parentheses), if the supply air is warmer than the set value.
- **Outside air** — This value indicates the outside air temperature.
- **Fan speed** — This value indicates the fan speed. If the ventilation unit has an automatic fan speed boost on, the set value is shown in parentheses, and then the actual fan speed.
- **Cell status** — Cell status indicates the status of the ventilation device heat exchanger cell. Possible statuses are:
  - **Heat recovery** — The heat recovery cell heats the air streaming in from outdoors.
  - **Cooling** — The heat recovery cell cools the air streaming in from outdoors.
  - **Cell bypass** — The inflowing air by-passes the heat recovery cell.
  - **Defrosting** — The heat recovery cell is being defrosted.

4. Press the **Right arrow** button.
5. The second information screen for the profile appears.

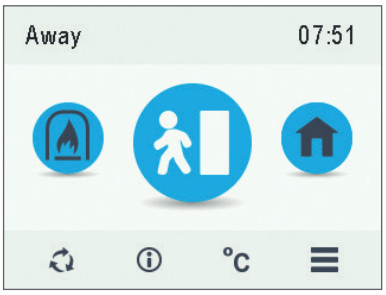


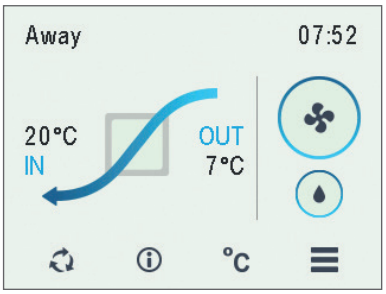
This screen contains the following information:

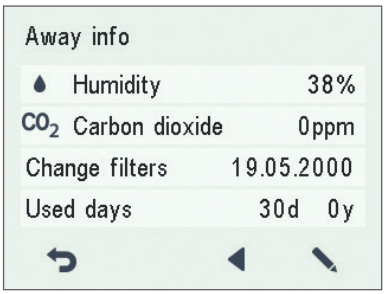
- **Humidity** — This value indicates the maximum measured humidity value that the system has read from the sensors.
- **Carbon dioxide** — This value indicates the maximum measured carbon dioxide value that the system has read from the sensors.
- **Change filters** — This value indicates the next recommended filter change date.
- **Used days** — This value indicates how long the device has been running.

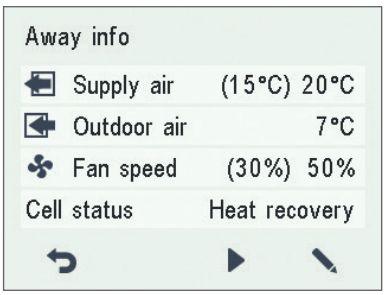


VIEWING THE AWAY PROFILE INFORMATION









If you want to view the Away profile settings, proceed as follows:

1. Open the **Away** profile main view.
2. Press the **Profile information** button.
3. The first information screen for the profile appears.

This screen contains the following information:

- **Supply air** — This value indicates the temperature of the air blown indoors and its set value (in parentheses), if the supply air is warmer than the set value.
- **Outside air** — This value indicates the outside air temperature.
- **Fan speed** — This value indicates the fan speed. If the ventilation unit has an automatic fan speed boost on, the set value is shown in parentheses, and then the actual fan speed.
- **Cell status** — Cell status indicates the status of the ventilation device heat exchanger cell. Possible statuses are:
  - **Heat recovery** — The heat recovery cell heats the air streaming in from outdoors.
  - **Cooling** — The heat recovery cell cools the air streaming in from outdoors.
  - **Cell bypass** — The inflowing air by-passes the heat recovery cell.
  - **Defrosting** — The heat recovery cell is being defrosted.

4. Press the **Right arrow** button.
5. The second information screen for the profile appears.

This screen contains the following information:

- **Humidity** — This value indicates the maximum measured humidity value that the system has read from the sensors.
- **Carbon dioxide** — This value indicates the maximum measured carbon dioxide value that the system has read from the sensors.
- **Change filters** — This value indicates the next recommended filter change date.
- **Used days** — This value indicates how long the device has been running.

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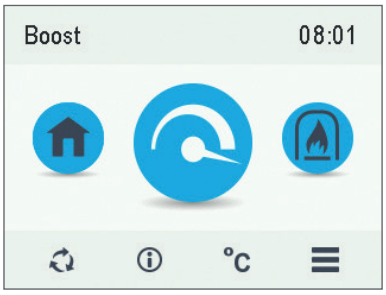
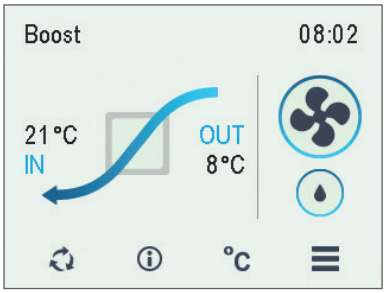
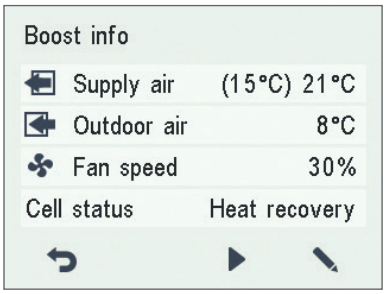
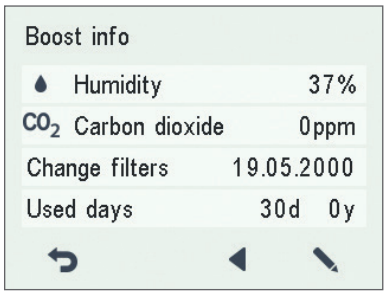
VIEWING THE BOOST PROFILE INFORMATION









If you want to view the Boost profile settings, proceed as follows:

1. Open **the Boost** profile main view.
2. Press the **Profile information** button.
3. The first information screen for the profile is opened.

This screen contains the following information:

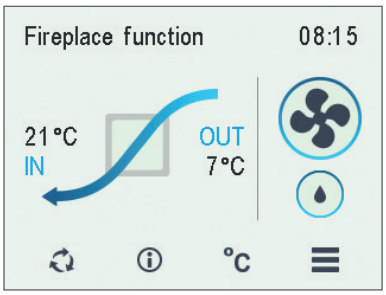
- **Supply air —** This value indicates the temperature of the air blown indoors and its set value (in parentheses), if the supply air is warmer than the set value.
- **Outside air —** This value indicates the outside air temperature.
- **Fan speed —** This value indicates the fan speed. If the ventilation unit has an automatic fan speed boost on, the set value is shown in parentheses, and then the actual fan speed.
- **Cell status —** Cell status indicates the status of the ventilation device heat exchanger cell. Possible statuses are:
  - **Heat recovery** — The heat recovery cell heats the air streaming in from outdoors.
  - **Cooling** — The heat recovery cell cools the air streaming in from outdoors.
  - **Cell bypass** — The inflowing air by-passes the heat recovery cell.
  - **Defrosting** — The heat recovery cell is being defrosted.

4. Press the **Right arrow** button.
5. The second information screen for the profile is opened.

This screen contains the following information:

- **Humidity** — This value indicates the maximum measured humidity value that the system has read from the sensors.
- **Carbon dioxide** — This value indicates the maximum measured carbon dioxide value that the system has read from the sensors.
- **Change filters** — This value indicates the next recommended filter change date.
- **Used days** — This value indicates how long the device has been running.

VIEWING THE FIREPLACE FUNCTION INFORMATION

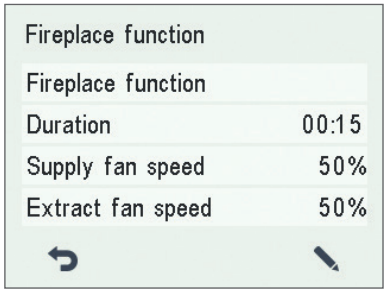


If you want to view the Fireplace function settings, proceed as follows:

1. Open the **Fireplace function** main view.
2. The profile main screen contains a summary of the profile data. Also see Table 2, "Profile symbols".
3. Press the **Profile information** button.

4. The first information screen for the profile appears. This screen contains the following information:

- **Duration** — This value indicates the enhanced ventilation duration when the **Fireplace function** is activated. The value is expressed in hours and minutes.
- **Supply fan speed** — This value indicates the percentage of the supply air fan speed in relation to the maximum speed.
- **Extract fan speed** — This value indicates the percentage of the extract air fan speed in relation to the maximum speed.



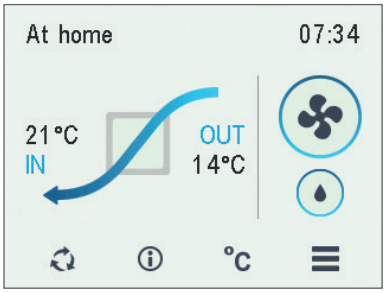
MODIFYING THE PROFILE SETTINGS

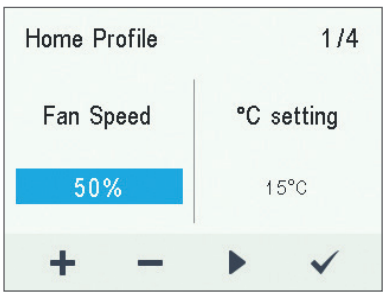
IMPORTANT

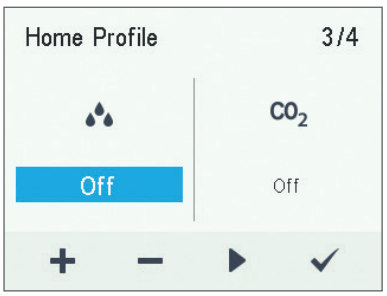
The system uses, but does not save the settings automatically. Your settings may be lost during, for example, a power outage. Remember to save your settings by selecting Expert settings > Save and restore settings.

MODIFYING THE AT HOME PROFILE SETTINGS

1. Open the **At home** profile main view.
2. Press the **Profile information** button.
3. Press the **Edit** button.
4. The fan speed setup screen is opened.
5. Set the **At home** profile fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.
6. Press the **Right arrow** button.
7. The temperature setup screen is opened.
8. Set the desired supply air temperature for the **At home** profile by using the **Plus** and **Minus** buttons. You can adjust the temperature in the range of +10°C — +25°C. The recommended temperature is +15°C or 2—3°C below the room temperature.
9. Press the **Right arrow** button.
10. The setup screen for the automatic fan speed control, based on the relative humidity, appears.
11. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the relative humidity, is used or not.
12. Press the **Right arrow** button.
13. The setup screen for the automatic fan speed control, based on the carbon dioxide content, appears.
14. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the carbon dioxide content, is used or not.
15. Press the **OK** button.







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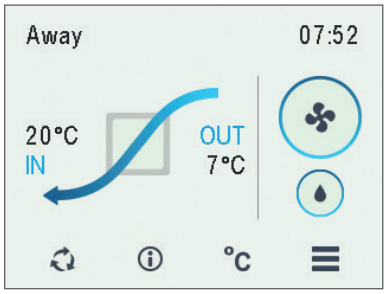
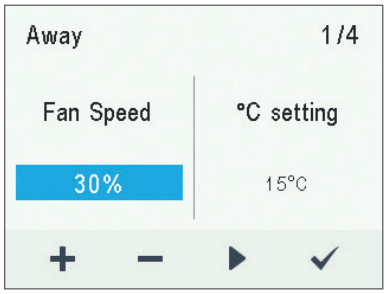
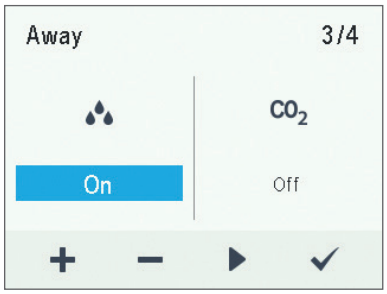
MODIFYING THE AWAY PROFILE SETTINGS

1. Open the **Away** profile main view.
2. Press the **Profile information** button.
3. Press the **Edit** button.
4. The fan speed setup screen is opened.
5. Set the **Away** profile fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.
6. Press the **Right arrow** button.
7. The temperature setup screen is opened.
8. Set the desired supply air temperature for the **Away** profile by using the **Plus** and **Minus** buttons. You can adjust the temperature in the range of +10°C — +25°C. The recommended temperature is +15°C or 2—3°C below the room temperature.
9. Press the **Right arrow** button.
10. The setup screen for automatic fan speed control, based on the relative humidity, appears.
11. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the relative humidity, is used or not.
12. Press the **Right arrow** button.
13. The setup screen for the automatic fan speed control, based on the carbon dioxide content, appears.
14. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the carbon dioxide content, is used or not.
15. Press the **OK** button.



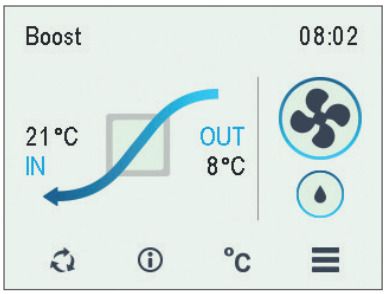


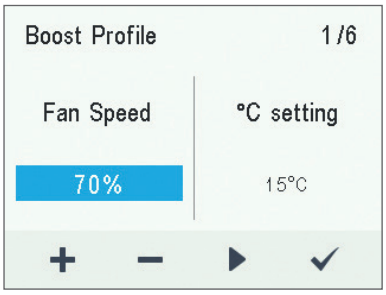


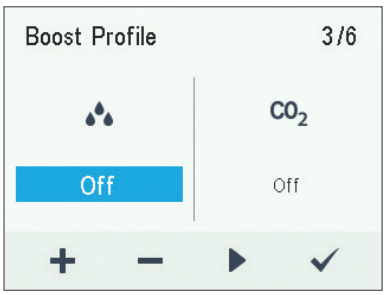
MODIFYING THE BOOST PROFILE SETTINGS

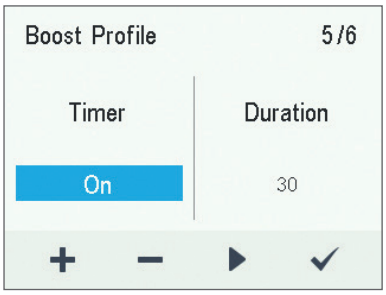
When you want to edit the Boost profile settings, proceed as follows:

1. Open **Boost** profile main view.
2. Press the **Profile information** button.
3. Press the **Edit** button.
4. The fan speed setup screen is opened.
5. Set the **Boost** profile fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.
6. Press the **Right arrow** button.
7. The temperature setup screen is opened.
8. Set the desired supply air temperature for the **Boost** profile by using the **Plus** and **Minus** buttons. The recommended temperature is +15°C or 2—3°C below the room temperature. You can adjust the temperature in the range of +10°C — +25°C.
9. Press the **Right arrow** button.
10. The setup screen for the automatic fan speed control, based on the relative humidity, appears.
11. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the relative humidity, is used or not.
12. Press the **Right arrow** button.
13. The setup screen for the automatic fan speed control, based on the carbon dioxide content, appears.
14. Use the **Plus** and **Minus** buttons to select whether the automatic fan speed control, based on the carbon dioxide content, is used or not.
15. Press the **Right arrow** button.
16. The profile timer setting screen is opened.
17. Use the **Plus** and **Minus** buttons to select whether the profile timer function is enabled or not. The options are:
    - **On** — When the timer is enabled, the **Boost** profile is only on for the period defined in the timer.
    - **Off** — When the timer is disabled, the **Boost** profile is used until you (or the week clock) change the profile.
18. Press the **Right arrow** button.
19. The profile timer duration setting screen is opened.
20. Set the profile timer duration by using the **Plus** and **Minus** buttons.
21. Press the **OK** button.









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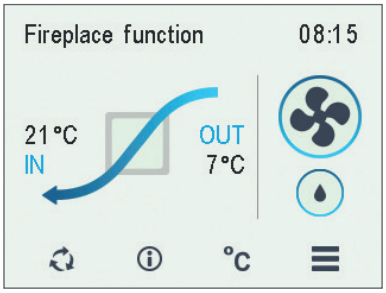
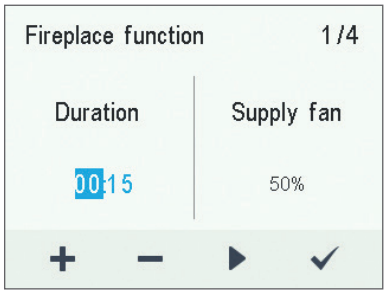
MODIFYING THE FIREPLACE FUNCTION SETTINGS

When you want to edit the Fireplace function settings, proceed as follows:

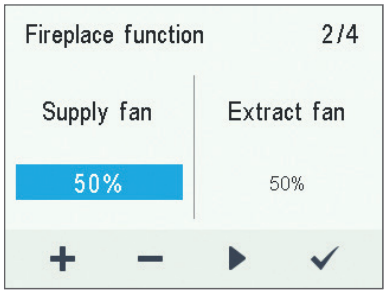
1. Open the **Fireplace function** main view.
2. Press the **Profile information** button.
3. Press the **Edit** button.
4. The fan speed setup screen is opened.
5. Use the **Plus** and **Minus** buttons to set the **Fireplace function** duration in minutes. This value determines how long the profile is enabled when you switch it on.
6. Press the **Right arrow** button.
7. The screen for setting the profile supply air fan speed appears.
8. Set the **Fireplace function** supply air fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.



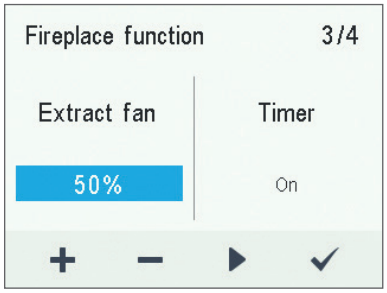


TIP

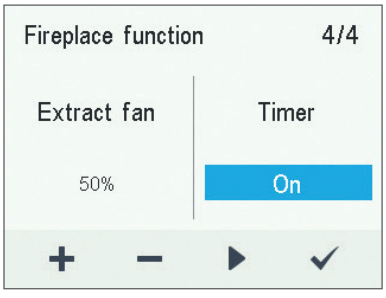
In the fireplace mode, we recommend that you increase the supply air fan speed, in order to obtain a positive pressure at the ventilation zone. We do not recommend reducing the extract air fan speed.



9. Press the Right arrow button.
10. The screen for setting the profile extract air fan speed will appear.
11. Set the **Fireplace function** extract air fan speed as a percentage of the maximum by using the **Plus** and **Minus** buttons.



12. Press the **Right arrow** button.
13. The profile timer setting screen is displayed.
14. Use the **Plus** and **Minus** buttons to select whether the profile timer function is enabled or not. The options are:
    - **On** — When the timer is enabled, the **Fireplace function** is only on for the period defined in the timer.
    - **Off** — When the timer is disabled, the **Fireplace function** is used until you (or the week clock) change the profile.
15. Press the **OK** button.



TEMPERATURES AND SENSORS

Vallox 145 MV Vallox 110 MV Vallox 096 MV

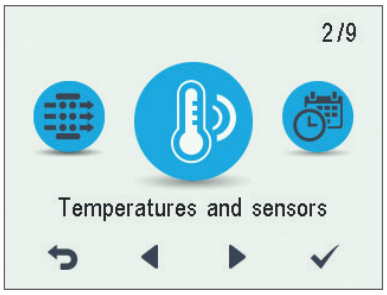
VIEWING TEMPERATURE DATA

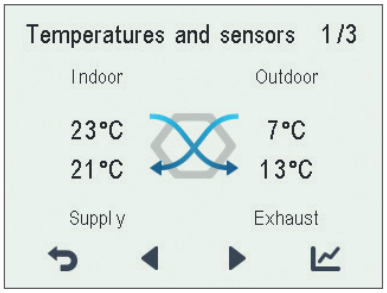
When you want to view the system temperature and sensor data, proceed as follows:

1. Select **Settings > Temperatures and sensors.**
2. Press the **OK** button.
3. The temperature and sensors summary screen is opened.

This screen contains the following information:

- **Indoor** — This value indicates the temperature of the air flowing into the unit, to be removed from the premises.
- **Outdoor** — This value indicates the temperature of the air flowing into the unit from outdoors.
- **Supply** — This value indicates the temperature of the air flowing into the premises.
- **Exhaust** — This value indicates the temperature of the air flowing outdoors.





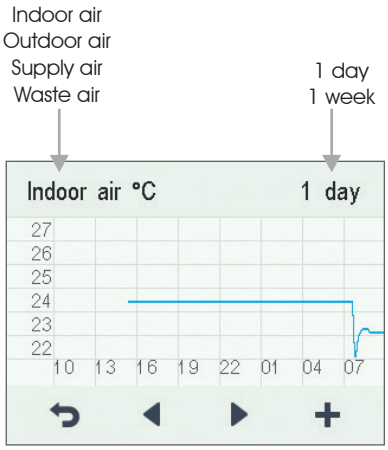
TIP

You can open the system temperature and sensor data by pressing the temperature button on the profile screen.

VIEWING TEMPERATURE STATISTICS

When you want to view the system temperature statistics, proceed as follows:

1. Select **Settings > Temperatures and sensors.**
2. Press the **OK** button.
3. The temperatures summary screen is opened.
4. Press the **Statistics** button.
5. A graph is opened, describing the indoor air temperature over the last 24 hours.
6. If you want to view weekly statistics, press the **Plus** button.
7. A graph is opened, describing the indoor air temperature over the last seven days.
8. You can return to daily statistics by pressing the **Minus** button.
9. You can return to the temperature type selection by pressing the **Back** button.
10. Press the **Right arrow** button.
11. A graph is opened, describing the outdoor air temperature over the last 24 hours.
12. If you want to view weekly statistics, press the **Plus** button.
13. A graph is opened, describing the outdoor air temperature over the last seven days.
14. You can return to daily statistics by pressing the **Minus** button.
15. You can return to the temperature type selection by pressing the **Back** button.



Indoor air temperature graph for the last 24 hours. The outside and supply air values are presented on a similar screen. You can view the graph in one day or in one week periods.

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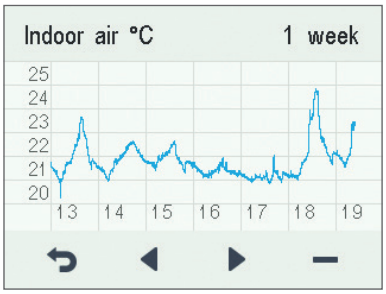
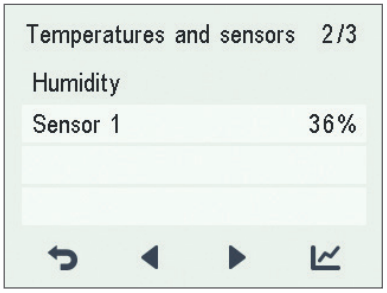
16. Press the **Right arrow** button.
17. A graph is opened, describing the supply air temperature over the last 24 hours.
18. If you want to view weekly statistics, press the **Plus** button.
19. A graph is opened, describing the supply air temperature over the last seven days.
20. You can return to daily statistics by pressing the **Minus** button.
21. You can return to the temperature type selection by pressing the **Back** button.
22. Press the Right arrow button.
23. A graph is opened, describing the waste air temperature over the last 24 hours.
24. If you want to view weekly statistics, press the **Plus** button.
25. A graph is opened, describing the waste air temperature over the last seven days.
26. You can return to daily statistics by pressing the **Minus** button.
27. You can return to the temperature type selection by pressing the **Back** button.
28. To exit the menu, press the **Back** button.

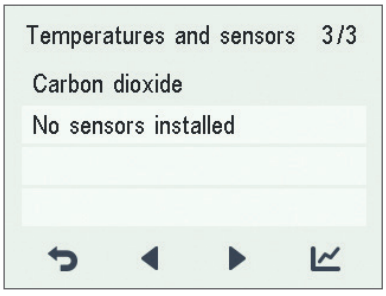


VIEWING HUMIDITY AND CARBON DIOXIDE VALUES

When you want to view individual humidity and carbon dioxide sensor data, proceed as follows:

1. Select **Settings > Temperatures and sensors.**
2. Press the **OK** button.
3. The temperature and sensors summary screen is opened.
4. Press the **Right arrow** button.
5. A screen displaying the maximum humidity value from the air humidity sensors is opened. The value refers to the relative humidity of the air.
6. Press the **Right arrow** button.
7. A screen displaying the maximum humidity value from the air humidity sensors is opened, again.
8. Press the **Right arrow** button.
9. A screen displaying the maximum carbon dioxide value from the air carbon dioxide sensors is opened.
10. Press the **Right arrow** button.
11. A screen displaying the maximum carbon dioxide value from the air carbon dioxide sensors is opened, again.
12. To exit the menu, press the **Back** button.





TEMPERATURES AND SENSORS

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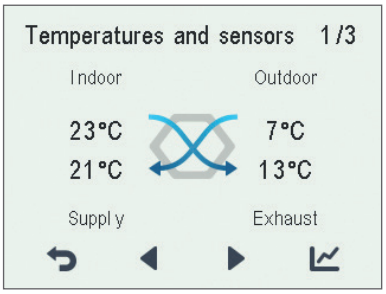
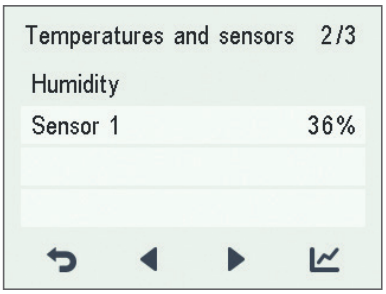
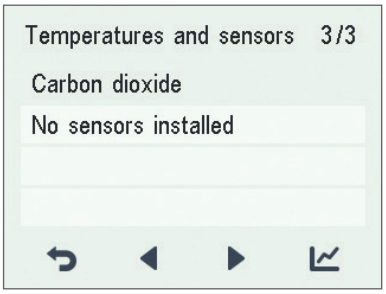
VIEWING HUMIDITY AND CARBON DIOXIDE STATISTICS

When you want to view statistics on the humidity and carbon dioxide values, proceed as follows:

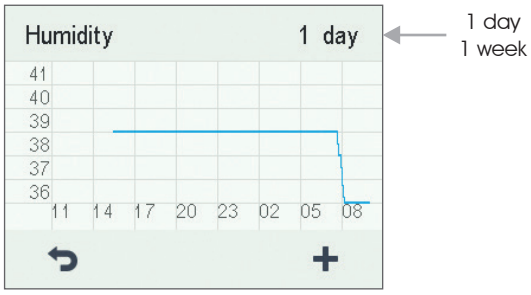
1. Select **Settings > Temperatures and sensors.**
2. Press the **OK** button.
3. The temperature and sensors summary screen is opened.
4. Press the **Right arrow** button.
5. A screen displaying the values of the humidity sensors 1-3 is opened.
6. Press the **Statistics** button.
7. A graph is opened, describing the values from the humidity sensor that gave the largest humidity value over the last 24 hours.
8. If you want to view weekly statistics, press the **Plus** button.
9. A graph is opened, describing the values from the humidity sensor that gave the largest humidity value over the last seven days.
10. You can return to daily statistics by pressing the **Minus** button.
11. You can return to the sensor group selection by pressing the **Back** button.
12. Press the Right arrow button twice.
13. A screen displaying the values of the carbon dioxide sensors 1-3 is opened.
14. Press the **Statistics** button.
15. A graph is opened, describing the values from the carbon dioxide sensor that gave the largest carbon dioxide value over the last 24 hours.
16. If you want to view weekly statistics, press the **Plus** button.
17. A graph is opened, describing the values from the carbon dioxide sensor that gave the largest carbon dioxide value over the last seven days.
18. You can return to daily statistics by pressing the **Minus** button.
19. Return to the sensor group selection and exit by pressing the **Back** button twice.



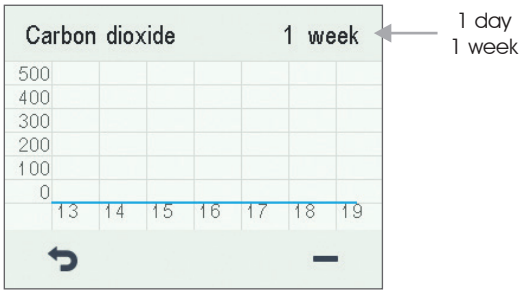




HUMIDITY AND CARBON DIOXIDE STATISTICS



Humidity statistics graph over the last 24 hours. You can view the graph in one day or in one week periods.



Carbon dioxide statistics graph over the last week. You can view the graph in one day or in one week periods.

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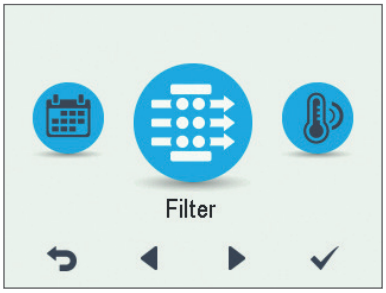
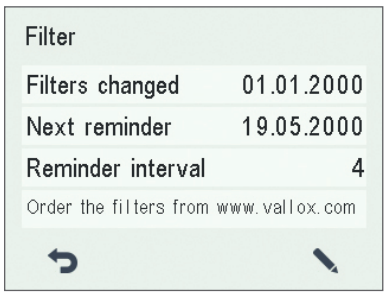
FILTER SETTINGS

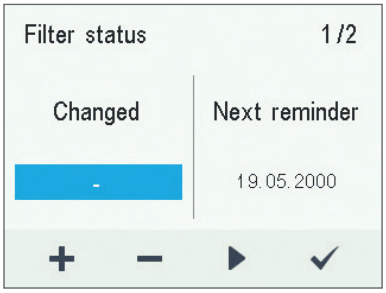


When you want to browse through the filter settings, proceed as follows:

1. Select **Settings > Filter**.
2. Press the **OK** button.
3. The filter status summary screen is opened.
4. This screen contains the following information:
   - **Filters changed** — This value indicates the date when the filter was last replaced.
   - **Next reminder** — This value indicates the date when a reminder for replacing the filter will be shown next.
   - **Reminder interval** — This value indicates the filter replace interval in months.

SETTING THE FILTER REPLACED DATE





This section describes how to enter information in the MyVallox Control control panel on replacing the Vallox ventilation unit filter. Replacing the filter itself is described in the Vallox ventilation unit maintenance instructions.

When you want to set the date when you replaced the Vallox ventilation unit filter, proceed as follows:

1. Select **Settings > Filter**.
2. Press the **OK** button.
3. The filter status summary screen is opened.
4. Press the **Edit** button.
5. The **Filter status** 1/2 screen is opened.
6. Press the **Plus** button. The **Filters changed** field value changes to **Today.**
7. Press the **OK** button.

NOTE

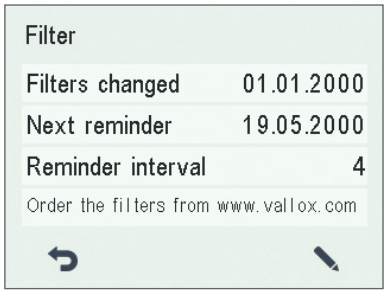
The system will automatically set the service reminder to remind you of the filter replacement. The reminder will be displayed when the set reminder interval has elapsed.

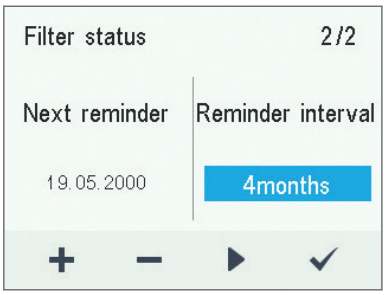
SETTING THE FILTER REPLACEMENT REMINDER INTERVAL

This section describes how to set the filter replacement reminder interval.

When you want to set the reminder interval for replacing the Vallox ventilation unit filter, proceed as follows:

1. Select **Settings > Filter**.
2. Press the **OK** button.
3. The filter status summary screen is opened.
4. Press the **Edit** button.
5. Press the **Right arrow** button.
6. The **Filter status** 2/2 screen is opened.
7. Set the desired reminder interval in months in the **Reminder interval** field by using the **Plus** and **Minus** buttons. You can set the interval value from 1 to 12 months. The factory setting is 4 months.
8. Press the **OK** button.



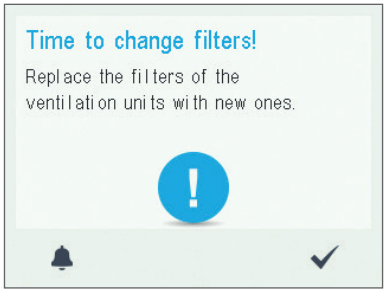


FILTER MAINTENANCE REMINDER

The maintenance reminder reminds you of the filter replacement through a pop-up window.

To acknowledge the maintenance reminder message, press the OK button.

Press the bell button to postpone the reminder for a week.



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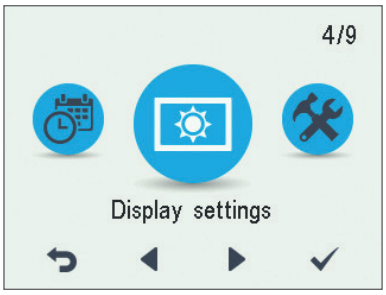
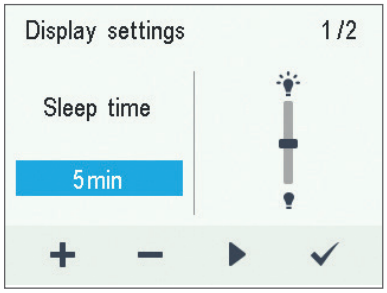
DISPLAY SETTINGS

SETTING THE SLEEP TIME

The MyVallox Control control panel automatically switches to sleep mode when the pre-set sleep time has elapsed. To set the sleep time, proceed as follows:

1. Select **Settings > Display settings.**
2. Press the **OK** button.
3. The **Display settings** 1/2 screen appears.
4. Use the **Plus** and **Minus** buttons to set the sleep time.
5. Press the **OK** button.





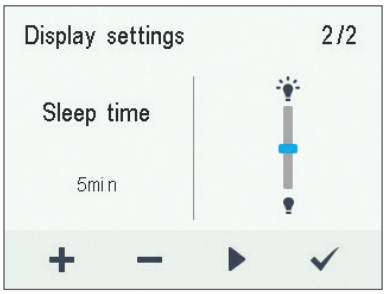
TIP

The MyVallox Control control panel automatically switches to sleep mode when the pre-set sleep time has elapsed. If you want to wake up the MyVallox Control control panel, press any button on the control panel.

ADJUSTING THE DISPLAY BRIGHTNESS

When you want to set the display brightness, proceed as follows:

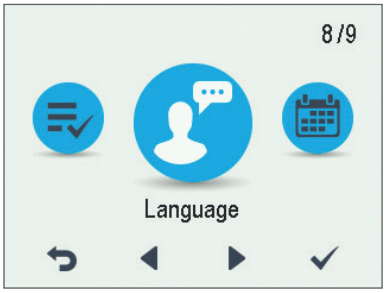
1. Select **Settings > Display settings.**
2. Press the **OK** button.
3. The Display settings screen appears.
4. Press the **Right arrow** button.
5. The **Display settings** 2/2 screen appears.
6. Use the **Plus** and **Minus** buttons to set the display brightness.
7. Press the **OK** button.

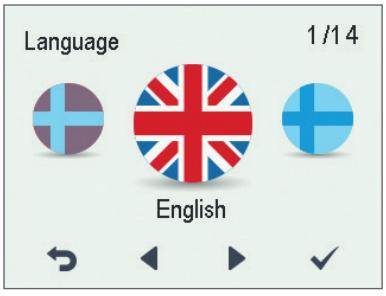


SELECTING THE USER INTERFACE LANGUAGE

You can select the user interface language as follows:

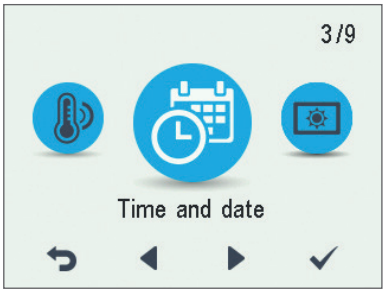
1. Select **Settings > Language**.
2. Press the **OK** button.
3. Select the language you want, for example, English.
4. Press the **OK** button.





TIME AND DATE

SETTING THE SYSTEM TIME AND DATE

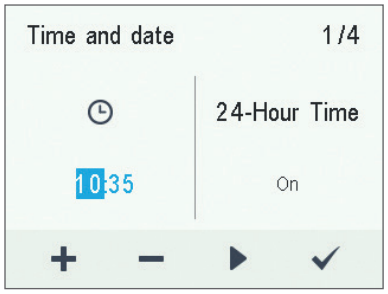


In the following chapters, you make system settings, as follows:

- Time
- 24 or 12 hour clock
- Automatic daylight saving time
- Date

NOTE
The system time will survive a few hours of power outage.

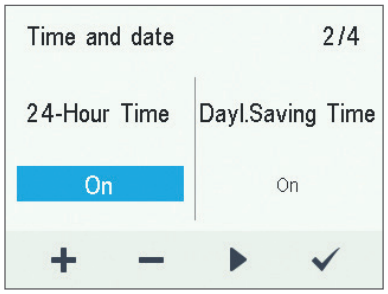
SETTING THE TIME



To set the time, proceed as follows:

1. Select **Settings > Time and date**.
2. Press the **OK** button.
3. The **Time and date** settings are opened.
4. Use the **Plus** and **Minus** buttons to set the hours.
5. Press the **Right arrow** button.
6. Use the **Plus** and **Minus** buttons to set the minutes.
7. Press the **OK** button.

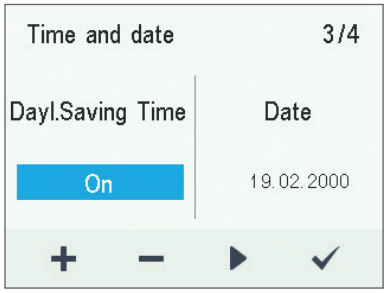
SELECTING THE 24 OR 12 HOUR CLOCK



By default, the system uses a 24 hour clock. If you want to use the 12 hour clock, proceed as follows:

1. Select **Settings > Time and date**.
2. Press the **OK** button.
3. The **Time and date** settings are opened.
4. Press the Right arrow button until the screen 2/4 appears.
5. Press the **Minus** button. The **24-Hour Time** setting value is changed to **Off**.
6. Press the **OK** button.

SETTING THE AUTOMATIC DAYLIGHT SAVING TIME



If you want the system to automatically switch over to daylight saving time, proceed as follows:

1. Select **Settings > Time and date**.
2. Press the **OK** button.
3. The **Time and date** settings are opened.
4. Press the **Right arrow** button until the screen 3/4 appears.
5. Press the **Plus** button. The **Dayl.Saving Time** setting value is changed to **Off**.
6. Press the **OK** button.

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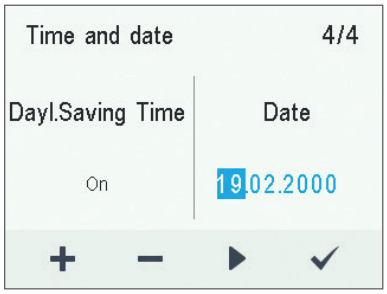
TIME AND DATE

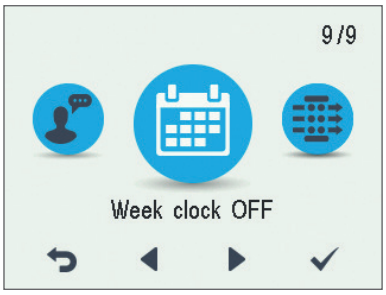
SETTING THE DATE



To set the date, proceed as follows:

1. Select **Settings > Time and date**.
2. Press the **OK** button.
3. The **Time and date** settings are opened.
4. Press the Right arrow button until the screen 4/4 appears.
5. Use the **Plus** and **Minus** buttons to set the date.
6. Press the **Right arrow** button.
7. Use the **Plus** and **Minus** buttons to set the month.
8. Press the **Right arrow** button.
9. Use the **Plus** and **Minus** buttons to set the year.
10. Press the **OK** button.

WEEK CLOCK



The week clock allows you to program a weekly program for the ventilation unit. The program controls the unit by changing the ventilation profile. You can set one of the following conditions for each hour of the week:

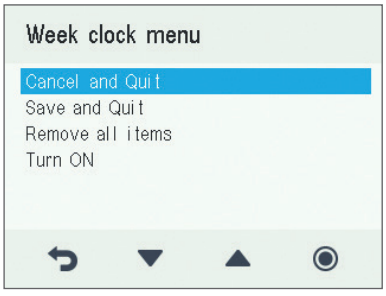
- At Home — Use the **At home** profile.
- Away — Use the **Away** profile.
- Boost — Use the **Boost** profile.
- Blank — Do not change the profile.

NOTE

If you change the profile manually and the week clock program is on, the selected profile will be active until the week clock switches to the next profile in the program.

If the humidity or carbon dioxide sensors control the ventilation, they will adjust the fan speed, regardless of whether the profile has been manually selected or selected by the weekly clock.

ENABLING THE WEEK CLOCK



If you want to use the week clock, proceed as follows:

1. Select **Settings > Week clock**.
2. Press the **OK** button.
3. The week view in the week clock is displayed.
4. Press the **Settings** button.
5. The **Week clock menu** appears.
6. Select **Turn ON**.
7. Press the **Select** button.
8. A confirmation screen is opened.

TIP

You can switch the week clock on or off by pressing the OK button in the **Week clock** screen for a few seconds.

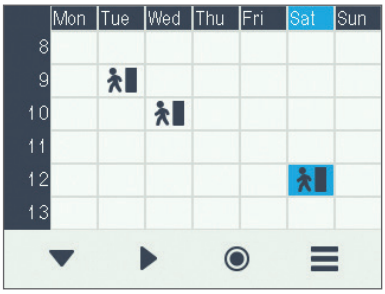
WEEK CLOCK

SETTING AND EDITING THE WEEKLY PROGRAM

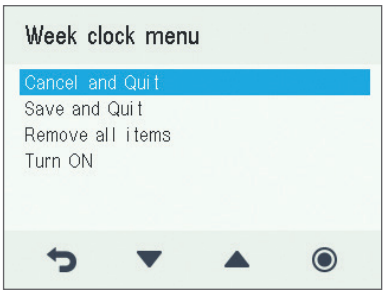
If you want to set the weekly timer program or edit an existing program, proceed as follows:

1. Select **Settings > Week clock**.
2. Press the **OK** button.
3. The week view in the week clock is displayed.
4. Use the Right arrow button to select the desired day.
5. Use the **Down arrow** button to select the desired time.
6. Use the **Select** button to select the ventilation profile, which will be switched on at the chosen time. You can browse the profile icons by using the **Select** button. The icons are:

- This icon selects the At home profile.
- This icon selects the Away profile.
- This icon selects the Boost profile.



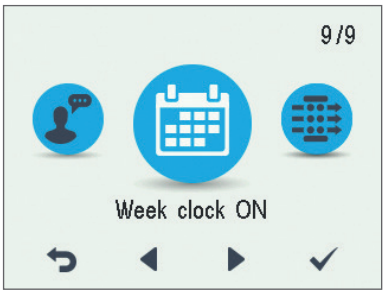
7. Set the other profile changes for the week clock as described above.
8. Press the **Settings** button.
9. The **Week clock menu** appears.
10. Select **Save and Quit.**
11. You can also exit without saving the weekly program or changes by selecting **Cancel and Quit**.
12. A confirmation screen is opened.
13. Press the **OK** button.

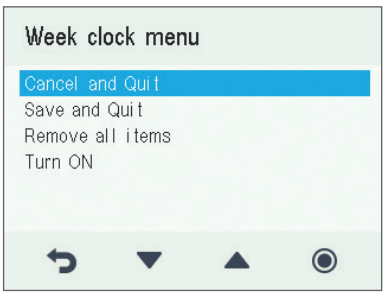


DISABLING THE WEEK CLOCK

If you want to disable the week clock, proceed as follows:

1. Select **Settings > Week clock**.
2. Press the **OK** button.
3. Press the **Settings** button.
4. The **Week clock menu** appears.
5. Select **Turn OFF**.
6. Press the **Select** button.
7. A confirmation screen is opened.
8. The week clock is now disabled. If you have set a weekly program, it will be saved in the system.





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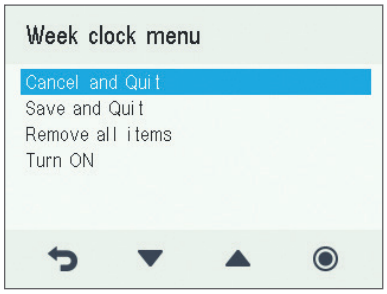
REMOVING THE WEEKLY PROGRAM



If you want to remove the weekly program settings from the system, proceed as follows:

1. Select **Settings > Week clock.**
2. Press the **OK** button.
3. Press the **Settings** button.
4. The **Week clock** menu appears.
5. Select Remove all items.
6. The confirmation screen for removing the weekly program is opened.
7. Press the **OK** button.
8. A confirmation screen is opened.
9. The weekly program has now been removed from the system.

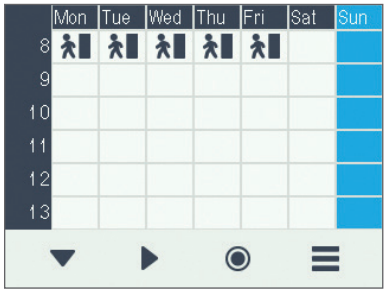
EXAMPLE OF SETTING A WEEKLY PROGRAM

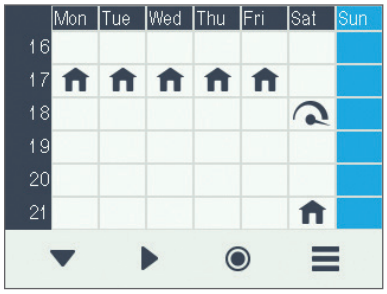
In this example, you set the weekly program as follows:

- Mon-Fri 08-16, **Away** from home.
- Mon-Fri 17-07, **At home**.
- Sat 08-17, **At home**.
- Sat 18-20, you are **At home** and need a ventilation boost for, for example, cooking.
- Sat 21-Mon 08, **At home**.

Set the week clock as follows:

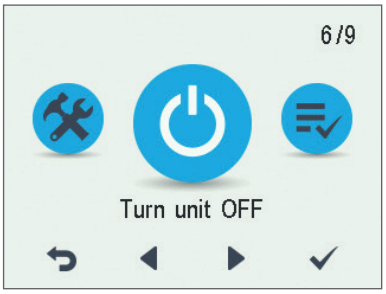
1. Open the week clock.
2. Select Monday and make the following settings:
   - At 8, select the **Away** profile.
   - At 17, select the **At home** profile.
3. Also make the corresponding settings for other weekdays.
4. Select Saturday and make the following settings:
   - At 18, select the **Boost** profile.
   - At 21, select the **At home** profile.
5. Ensure that the week clock is enabled.
6. The weekly program is now set.

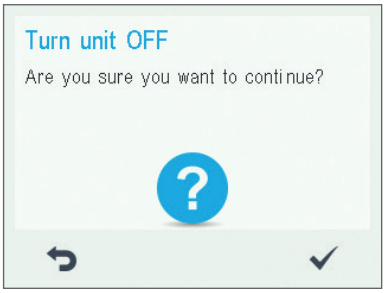




The figures above depict a week clock set in line with this example.

SWITCHING THE UNIT OFF





If you want to switch off the ventilation unit, proceed as follows:

1. Select **Settings > Turn unit OFF**.
2. Press the **OK** button.
3. The system asks for confirmation.
4. Press the **OK** button.
5. The ventilation unit is now switched off.

TIP

If you want to re-start the ventilation unit, press any key.

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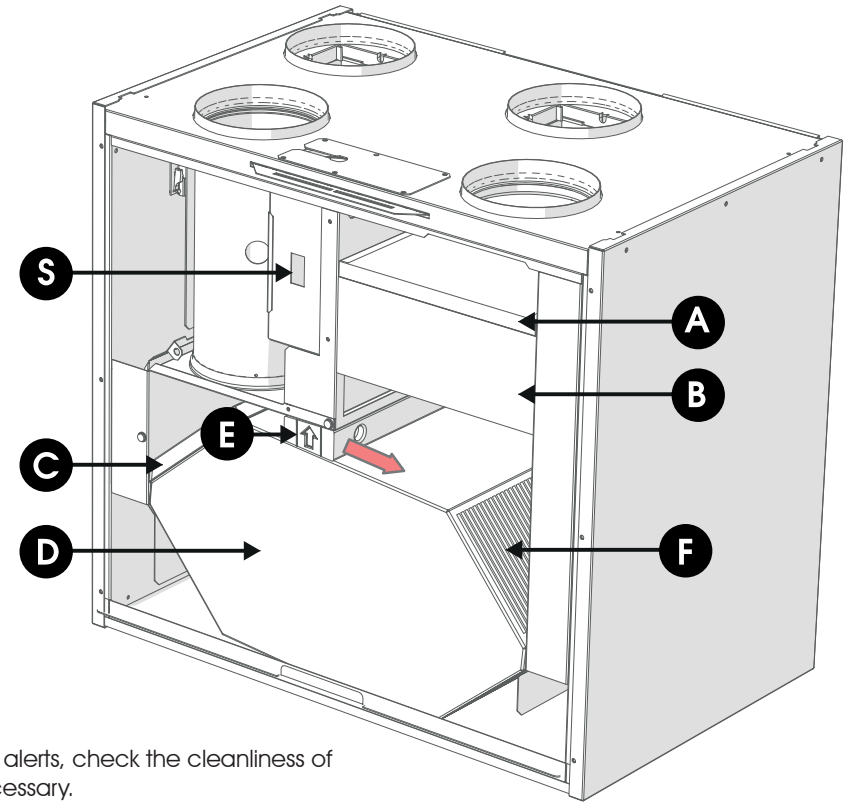
BEFORE YOU START MAINTENANCE WORK

When you open the device door, the safety switch (S) cuts the power. Despite this, disconnect the power supply plug. Always disconnect the power plug before starting the ventilation unit maintenance.

There are two equipment models, left (L) and right-handed (R). The figure below depicts the right-handed model.



FILTERS

When the maintenance reminder alerts, check the cleanliness of the filters and replace them if necessary.
The Vallox ventilation unit filters the air with three filters:

- A coarse filter filters the incoming air for insects and heavy pollen and other dust.
- A F7 class fine filter filters the incoming air for fine dust, invisible to the eye.
- A coarse filter filters the exhaust air and keeps the heat recovery cell clean.

The filter change interval depends on the ambient concentrations of the dust. We recommend changing the filter every spring and autumn, but, at least, once a year.

TIP

By using original Vallox filters, you ensure the proper functioning of the ventilation unit and the best filtering results.

If you want to change the filters, proceed as follows:

1. Disconnect the power plug for the ventilation unit.
2. Open the Vallox-ventilation unit door by lifting the latch.
3. Lift the door off.
4. Remove the old filters (A, B, C) and discard them.
5. Install the new filters (A, B, C) in place.
6. Close the ventilation unit door. Make sure that the door safety switch penetrates to the door switch and allows the unit to be switched on.
7. Insert the plug back into the electrical outlet.
8. The filters have now been changed.

HEAT EXCHANGER CELL

Check that the heat exchanger cell is clean every two years or in conjunction with changing the filters.

NOTE

Do not wash the entalphy cell, if one is installed in the unit. Only wash the aluminium or plastic cell.

If you want to check the heat recovery cell, proceed as follows:

1. Disconnect the power plug for the ventilation unit.
2. Open the Vallox ventilation unit door by lifting the latch up.
3. Lift the door off.
4. Remove the filters (A, B, C).
5. Remove the sealing strip (E) above the cell, in the direction of the arrow.
6. Lift and pull the cell (D) out of the unit.
7. If the cell is dirty, clean it by immersing it in warm water with a mild detergent.
8. Rinse the cell clean with a water spray. Do not use a pressure washer.
9. When the water has drained from between the laminae, reassemble the ventilation unit in the reverse order.
10. When reassembling model 096 MV, check that the sealing strip below the cell is pressed against the bottom of the unit.
11. Close the door and connect the plug back into the wall outlet.
12. The heat recovery cell has now been checked and cleaned.

WARNING

Handle the cell carefully! Do not, for example, lift the cell by its laminae. The cell laminae are very thin and easily damaged.

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FANS

Check the cleanliness of the fans in conjunction with the filters and heat recovery cell maintenance. Clean the fans, if necessary.

You can clean the fan blades with compressed air or by brushing them with a brush. Do not remove or move the fan blade balancing pieces.

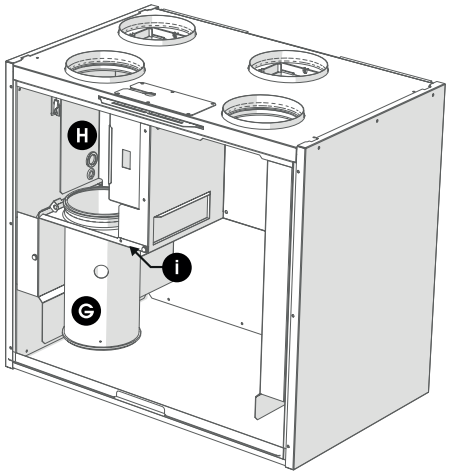
WARNING

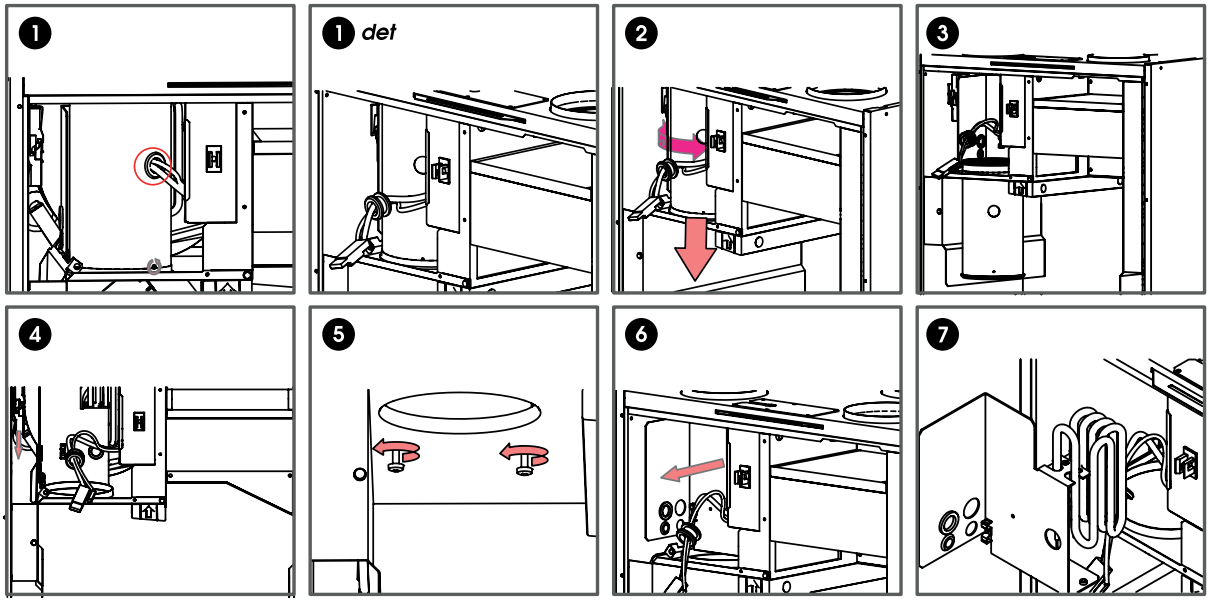
The fans are very sensitive to external shocks. We recommend that you clean the fans in place.

CLEANING THE SUPPLY AIR FAN

When you want to clean the supply air fan, proceed as follows:

1. Disconnect the power plug for the ventilation unit.
2. Open the Vallox ventilation unit door by lifting the latch up.
3. Lift the door off.
4. Remove the extract air filter (C), the cell top bracket (E) and the heat recovery cell (D), as described in sections Filters and Heat Recovery Cell.
5. Pull out the temperature sensor (figure 1) located at the top of the extract air duct (**G**). Remove the stopper screw (**I**) at the bottom of the duct. The extract air duct now comes off by turning and pushing it down at the same time (figure 2).
6. Remove the temperature sensor from the resistance support (figure 4).
7. Remove the post heating radiator support, which is attached





by two wing screws (110 MV and 145 MV) or screws (096 MV) from below (figure 5).

8. Pull the radiator and the support out of the unit (figures 6 and 7) and remove the quick connector for the radiator wire.

WARNING

Make sure that the radiator is not hot, before you pull it out of the unit.

9. The fan can now be cleaned in place. We recommend that you clean the fans in place.
10. If you want to remove the fan for cleaning, proceed as follows.

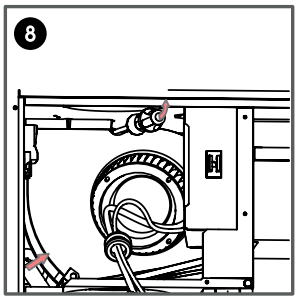
    a. If necessary, remove the arm pins. Use pliers to press the pins straight, so that they are easier to install back later.
    b. Push the fan gently upward (figure 9).
    c. Pry the plastic lock to the right of the fan with, for example, a screwdriver (figure 10).
    d. The fan falls down.
    e. Pull the fan out of the unit (figure 11).
    f. Disconnect the fan wire quick connector (figure 12). The fan has now been removed for cleaning.

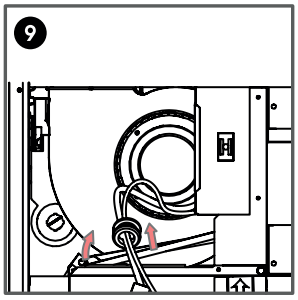
11. Reassemble the ventilation unit in the reverse order.

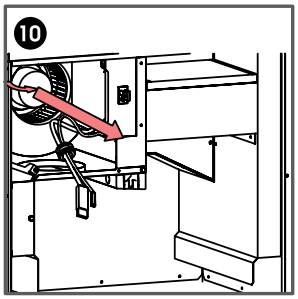
TIP

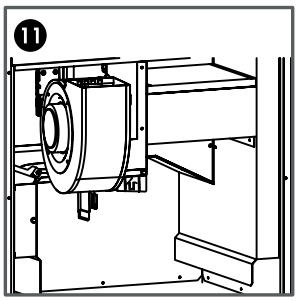
When you re-install the temperature sensor, install it with the tip upward in such a way that it does not get squeezed between the bypass plate, and that it does not lean against the radiator frame.

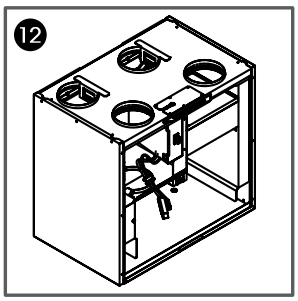
12. Close the door and connect the plug back into the wall outlet.
13. The fan has now been checked and cleaned.











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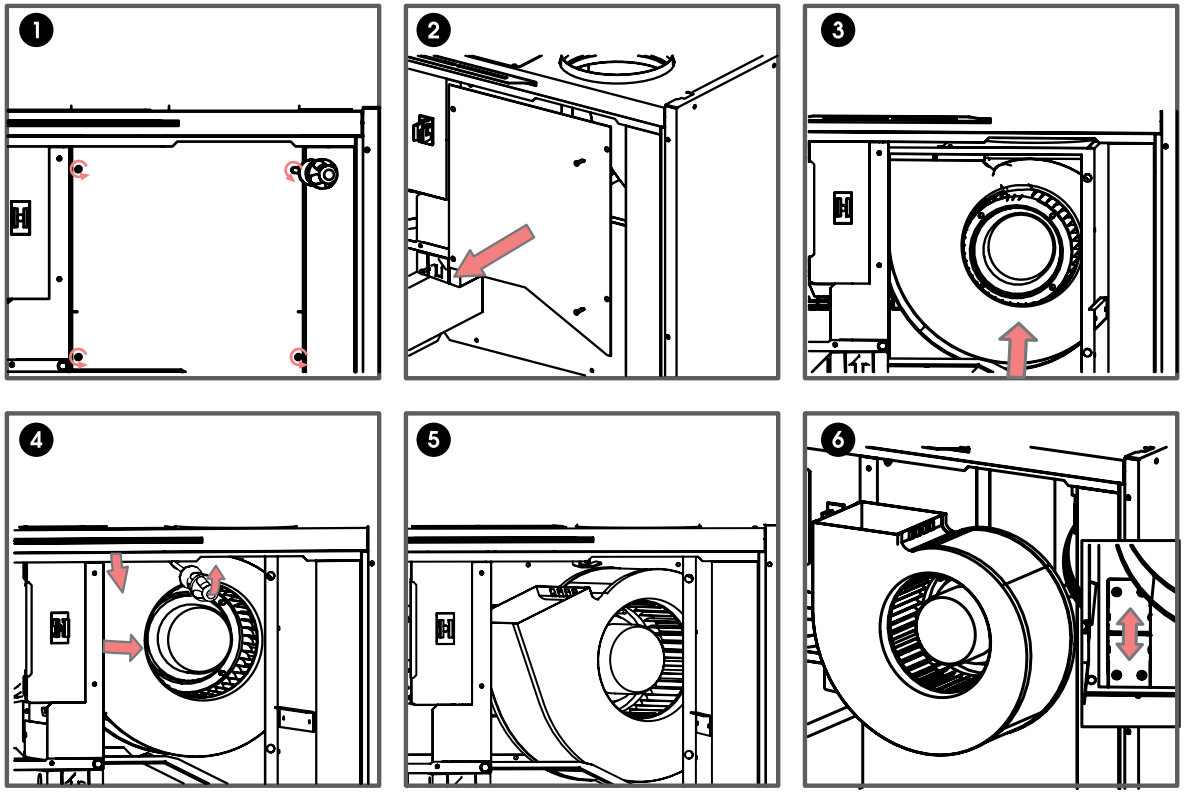
CLEANING THE EXTRACT AIR FAN

When you want to clean the extract air fan, proceed as follows:

1. Disconnect the power plug for the ventilation unit.
2. Open the Vallox-ventilation unit door by lifting the latch.
3. Lift the door off. Please note that the door is heavy.
4. Remove the filters, the cell top support and the heat recovery cell, as described in chapters Filters and Heat Recovery Cell.
5. Open the four screws (PZ2) (figure 1) on the extract air fan cover and remove the cover (figure 2).
6. The fan can now be cleaned in place.
7. If you want to remove the fan for cleaning, proceed as follows.
   a. Push the fan gently upward (figure 3).
   b. Pry the plastic lock to the right of the fan with, for example, a screwdriver (figure 4).
   c. The fan falls down (figure 5).
   d. Pull the fan out of the unit.
   e. Disconnect the fan wire quick connector (figure 6).
8. Clean the fan.
9. Reassemble the ventilation unit in the reverse order.
10. Close the door and connect the plug back into the wall outlet.
11. The extract air fan has now been checked and cleaned.



CONDENSED WATER

In the heating season, the extract air humidity condenses to water. Water formation may be abundant in new buildings, or if the ventilation is low, compared to the humidity production of residents. Condensed water must be able to get out of the unit without obstruction. Check in conjunction with maintenance, for example, during the autumn before the heating season begins, that the condensing water outlet at the bottom pool is not clogged and that there is no leakage. You can check it by pouring a little water into the pool. Clean, if necessary. Check the condensing water outlet location in section Mounting.

NOTE

There may be some water in the condensed water pool, at the bottom of the unit. This is normal, and requires no actions from you.

WARNING

Water must not be allowed to enter the electrical system.

TROUBLESHOOTING

The table below contains troubleshooting and fault repair instructions.

FAULT	CAUSE	DO THIS
The user interface shows the text: Extract fan stop	The extract air fan has stopped.	Make sure that the fan has stopped. The fan wiring and operation must be checked and, if necessary, the fan must be replaced. Contact the service centre.
The user interface shows the text: Supply fan stopped	The supply air fan has stopped.	Make sure that the fan has stopped. The fan wiring and operation must be checked and, if necessary, the fan must be replaced. Contact the service centre.
The user interface shows the text: Cell frozen	The heat recovery cell is too frozen.	Use the control panel to carry out a manual defrost (Service menu > Cell defrost). Try to figure out why the heat recovery cell is frozen.
The user interface shows the text: Temperature sensor 1/2/3/4/5	The temperature sensor, as indicated by the user interface, is damaged.	The sensor mounting must be checked and, if necessary, the sensor must be replaced. Contact the service centre.
The user interface shows the text: External sensor	The external temperature sensor is damaged.	The sensor mounting must be checked and, if necessary, the sensor must be replaced. Contact the service centre.
The user interface shows the text: Postheater	The post-heater does not heat.	The heater mounting must be checked and, if necessary, the heater must be replaced. Contact the service centre.
The user interface shows the text: Bus fault	Problems in the data transfer bus.	Make sure that the Modbus bus is connected correctly and that the devices connected to the Modbus bus are functioning properly.
The ventilation unit is not working, the control panel is not working.	The 230 VAC power is lost.	Check: • The fuses in the equipment room • The ventilation unit power supply fuses • The ventilation unit motherboard fuse
The ventilation unit is working, the control panel is not working.	The control panel 24 VDC power is lost or the control panel is damaged.	Check the wiring between the unit and the control panel. Contact the service centre, if necessary.

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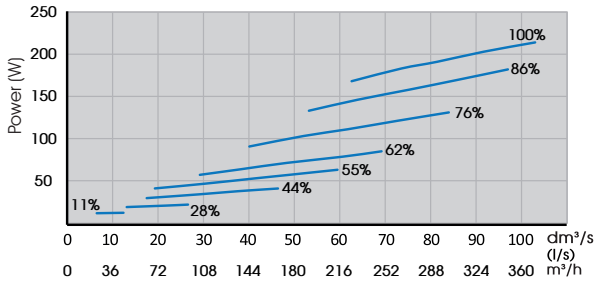
TECHNICAL SPECIFICATIONS

Product codes **Vallox 096 MV R** **Vallox 096 MV L**	Vallox number 3474450 3474550	HVAC code 7912030 7912031	**Additional heating radiator**		–
Air volumes	Supply Air Extract Air	92 l/s, 331m³/h, 100 Pa 95 l/s, 342m³/h, 100 Pa	**Fans**	Supply Air Extract Air	0.119kW, 0.9A EC 0.119kW, 0.9A EC
Electrical connection		230V, 50Hz 5.1A (power plug)	**Operating efficiencies**	Annual efficiency Supply air efficiency Specific Fan Power (SFP)	75 % A+ 81 % 1.0 (38 l/s) B
Enclosure protection degree		IP 34	**Filters**	Supply air Extract air	G4 and F7 G4
Post-heating radiator		Power, 900 W	**Heat recovery by-pass**		Automatic
The preheating radiator		–	**Weight**		53 kg

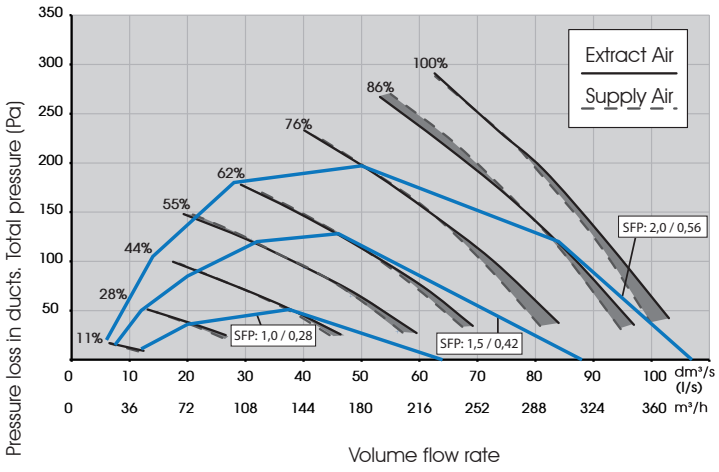
FAN INPUT POWER



SFP rate (Specific Fan Power)
recommended value <2.0 (kW m³/s)

$$SFP = \frac{\text{Input power (total W)}}{\text{Measurement airflow (extract l/s)}}$$

SUPPLY / EXTRACT AIR VOLUMES



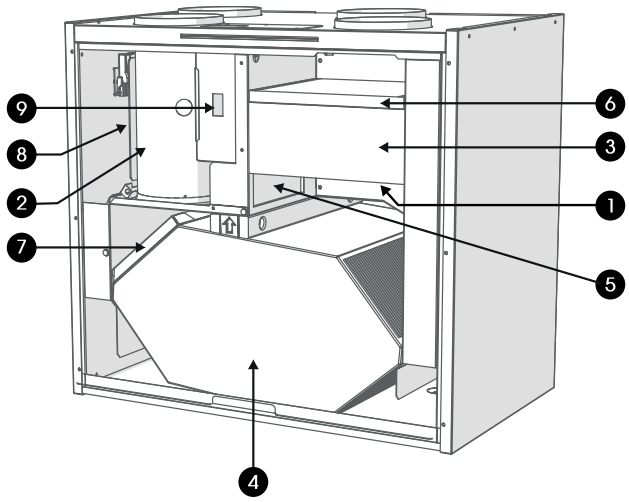
SOUND VALUES

		Sound power level in supply air duct (one duct) by octave band L_w, dB								Sound power level in extract air duct (one duct) by octave band L_w, dB							
Adjustment position		11 %	28 %	44 %	55 %	62 %	76 %	86 %	100 %	11 %	28 %	44 %	55 %	62 %	76 %	86 %	100 %
Air flow dm³/s (l/s)		10.6	25.2	38.1	46.6	53.8	65.6	72.9	76.0	12.0	27.6	36.7	44.2	50.5	61.0	70.4	76.4
Air flow m³/h		38.16	90.72	137.16	167.76	193.68	236.16	262.44	273.6	43.2	99.36	132.12	159.12	181.8	219.6	253.44	275.04
Medium frequency of the octave band Hz	63	39	52	61	62	64	71	69	68	26	30	40	44	47	53	54	57
	125	36	45	51	56	58	62	65	66	24	34	40	46	49	53	57	57
	250	41	51	57	60	62	65	67	68	22	33	39	42	45	49	53	54
	500	38	50	54	57	60	63	65	66	28	39	44	47	49	53	55	56
	1000	34	48	54	57	59	62	64	65	23	36	42	45	48	51	54	55
	2000	24	43	50	55	57	61	64	65	13	24	31	35	37	41	43	44
	4000	16	32	42	47	49	54	56	58	16	17	21	24	26	30	33	33
	8000	21	21	27	34	38	44	48	49	21	21	21	21	21	22	23	24
L_W, dB		45	57	64	66	69	73	74	74	33	43	49	52	55	59	62	63
L_{WA}, dB(A)		39	52	58	61	64	67	69	70	28	39	45	48	51	54	57	57

	Sound pressure level dB (A) coming from the unit through the envelope in the rooms where the unit has been mounted (10m² sound absorption) AIR FLOWS (supply/extract)							
Adjustment position	11%	28%	44%	55%	62%	76%	86%	100%
Air flow dm³/s (l/s)	14/15	31/30	48/44	60/54	68/62	82/74	92/83	98/89
Air flow m³/h	50.4/54	111.6/108	172.8/158.4	216/194.4	244.8/223.2	295.2/266.4	331.2/298.8	352.8/320.4
L_{pA}, dB (A)	23	29	35	38	41	44	46	47

TECHNICAL SPECIFICATIONS 096 MV

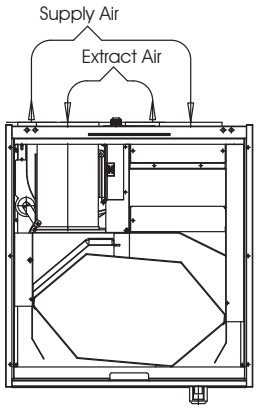
MAIN PARTS



Model R in the figure.
In the L model, the parts are mirrored

1. Extract air fan (behind the protective cover)
2. Supply air fan (behind the extract air duct)
3. Outdoor air filter F7
4. Heat recovery cell
5. Summer / winter damper
6. Outdoor air filter G4
7. Extract air filter G4
8. Post-heating radiator (behind the extract air duct)
9. Safety switch

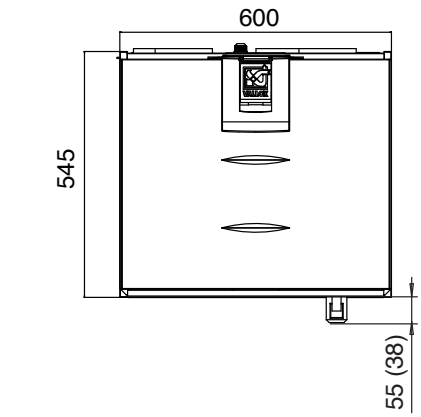
MEASUREMENT POINTS

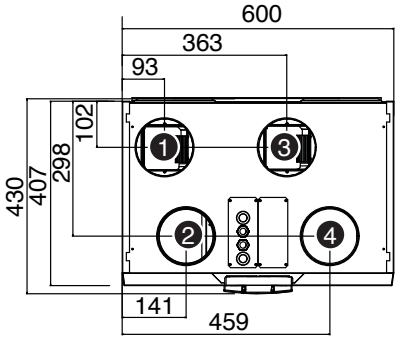


Measurement points after the connection outlet.
Fan curves indicate the total pressure available for duct losses.

DIMENSIONS AND DUCT OUTLETS

Dimensions





DUCT OUTLETS

Model R

Inner diameter of the female outlet collar ø125 mm

1. Supply air to the apartment
2. Exhaust air from the apartment to the unit
3. Exhaust air out
4. Outdoor air to unit

Model L

Inner diameter of the female outlet collar ø125 mm

1. Exhaust air out
2. Outdoor air to unit
3. Supply air to the apartment
4. Exhaust air from the apartment to the unit

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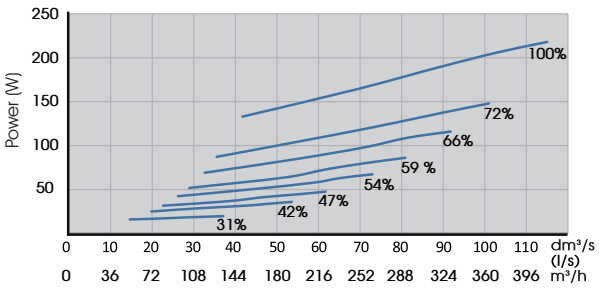
TECHNICAL SPECIFICATIONS

Product codes **Vallox 110 MV R** **Vallox 110 MV L**	Vallox number 3446650 3446750	HVAC code 7912039 7912040	**Additional heating radiator**		Power, 900W
Air volumes	Supply Air Extract Air	107 l/s, 386 m³/h, 100 Pa 113 l/s, 407m³/h, 100 Pa	**Fans**	Supply Air Extract Air	0.119kW, 0.9A EC 0.119kW, 0.9A EC
Electrical connection		230V, 50Hz 9.6 A (power plug)	**Operating efficiencies**	Annual efficiency Supply air efficiency Specific Fan Power (SFP)	75 % A+ 84 % 0,9 (50 l/s) A
Enclosure protection degree		IP 34	**Filters**	Supply air Extract air	G4 and F7 G4
Post-heating radiator		Power, 900 W	**Heat recovery by-pass**		Automatic
The preheating radiator		–	**Weight**		64 kg

FAN INPUT POWER

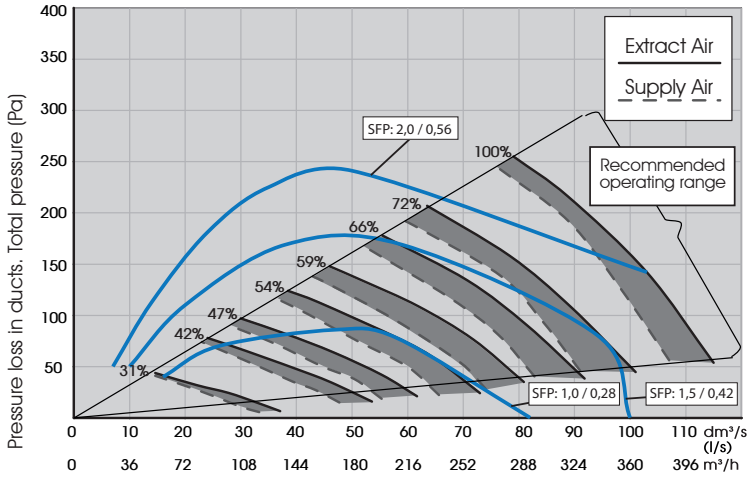


Volume flow rate

SFP rate (Specific Fan Power)
recommended value <2.0 (kW m³/s)

$$SFP = \frac{\text{Input power (total W)}}{\text{Measurement airflow (extract l/s)}}$$

SUPPLY / EXTRACT AIR VOLUMES



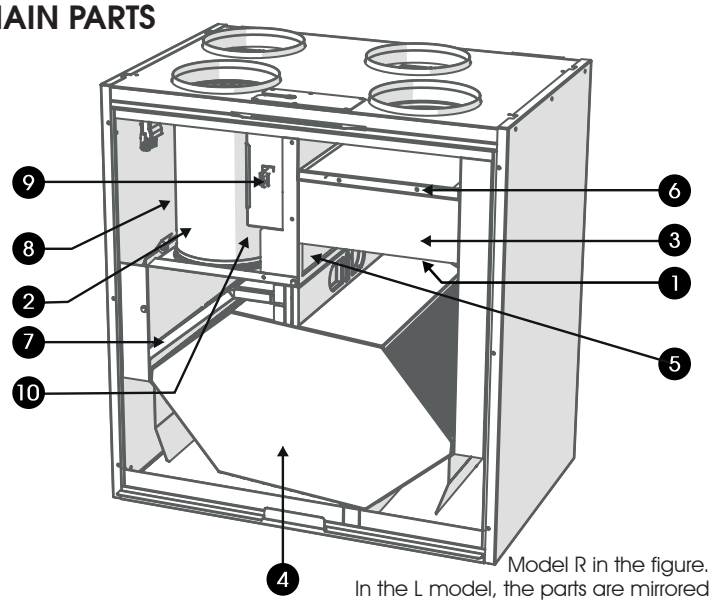
Volume flow rate

SOUND VALUES

		Sound power level in supply air duct (one duct) by octave band L_w, dB								Sound power level in extract air duct (one duct) by octave band L_w, dB							
Adjustment position		31 %	42 %	47 %	54 %	59 %	66 %	72 %	100 %	31 %	42 %	47 %	54 %	59 %	66 %	72 %	100 %
Air flow dm³/s (l/s)		25.7	39.3	44.9	51.0	57.5	67.6	76.6	88.9	27.8	43.1	46.7	58.8	61.9	70.8	78.4	88.8
Air flow m³/h		92.52	141.48	161.64	183.6	207	243.36	275.76	320.04	100.08	155.16	168.12	211.68	222.84	254.88	282.24	319.68
Medium frequency of the octave band Hz	63	60	65	68	69	72	74	75	77	58	62	65	68	72	74	73	76
	125	55	63	66	69	71	72	74	78	45	52	56	58	62	64	65	68
	250	49	57	60	64	66	68	70	73	32	38	41	45	48	51	53	56
	500	49	51	53	56	59	61	63	67	36	45	43	46	48	51	53	56
	1000	46	53	55	58	60	62	63	65	31	37	39	42	43	45	47	50
	2000	37	46	50	54	57	60	62	65	19	25	28	31	33	36	38	41
	4000	27	39	43	47	50	53	56	60	*	*	13	16	21	23	26	30
	8000	*	26	32	37	42	46	49	55	*	*	*	*	*	*	*	20
L_w dB		62	68	71	73	76	77	79	82	58	62	65	68	72	74	74	77
L_{WA}, dB(A)		50	56	59	62	65	67	69	72	37	44	46	48	51	53	55	58

	Sound pressure level dB (A) coming from the unit through the envelope in the rooms where the unit has been mounted ($10m^2$ sound absorption) AIR FLOWS (supply/extract)							
Adjustment position	31%	42%	47%	54%	59%	66%	72%	100%
Air flow dm³/s (l/s)	29/32	45/50	51/59	60/67	67/75	77/84	84/90	98/105
Air flow m³/h	104.4/115.2	162/180	183.6/212.4	216/241.2	241.2/270	277.2/302.4	302.4/324	352.8/378
L_{pA}, dB (A)	24	32	32	35	37	40	42	45

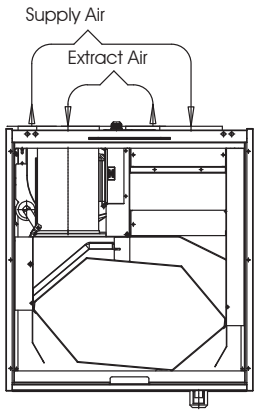
MAIN PARTS



Model R in the figure.
In the L model, the parts are mirrored

1. Extract air fan (behind the protective cover)
2. Supply air fan (behind the extract air duct)
3. Outdoor air filter F7
4. Heat recovery cell
5. Summer / winter damper
6. Outdoor air filter G4
7. Extract air filter G4
8. Post-heating radiator (behind the extract air duct)
9. Safety switch
10. Additional heater(behind the extract air duct)

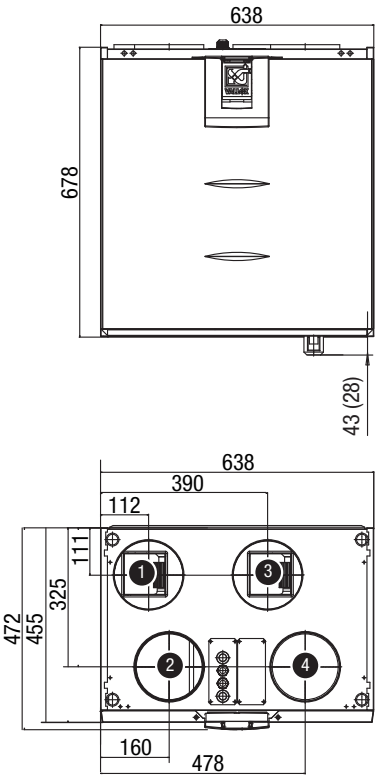
MEASUREMENT POINTS



Measurement points after the connection outlet. Fan curves indicate the total pressure available for duct losses.

DIMENSIONS AND DUCT OUTLETS

Dimensions



DUCT OUTLETS

Model R

Inner diameter of the female outlet collar ø160 mm

1. Supply air to the apartment
2. Exhaust air from the apartment to the unit
3. Exhaust air out
4. Outdoor air to unit

Model L

Inner diameter of the female outlet collar ø160 mm

1. Exhaust air out
2. Outdoor air to unit
3. Supply air to the apartment
4. Exhaust air from the apartment to the unit

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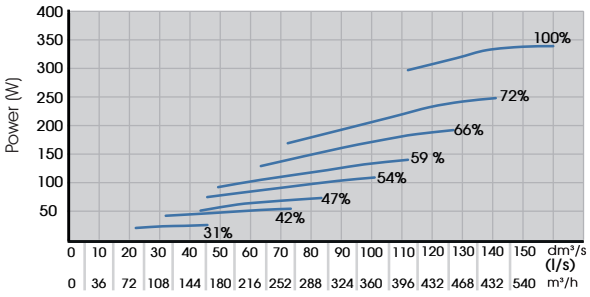
TECHNICAL SPECIFICATIONS

Product codes **Vallox 145 MV R** **Vallox 145 MV L**	Vallox number 3475650 3475750	HVAC code 7912049 7912050	**Additional heating radiator**		Power, 1500 W
Air volumes	Supply Air Extract Air	150 l/s, 540 m³/h, 100 Pa 155 l/s, 558m³/h, 100 Pa	**Fans**	Supply Air Extract Air	0.175 kW, 1.25A 0.175 kW, 1.25A
Electrical connection		230V, 50Hz 11.9 A (power plug)	**Operating efficiencies**	Annual efficiency Supply air efficiency Specific Fan Power (SFP)	75 % A+ 84 % 0,9 (70 l/s) A
Enclosure protection degree		IP 34	**Filters**	Supply air Extract air	G4 and F7 G4
Post-heating radiator		Power, 900 W	**Heat recovery by-pass**		Automatic
The preheating radiator		–	**Weight**		88.0 kg

FAN INPUT POWER

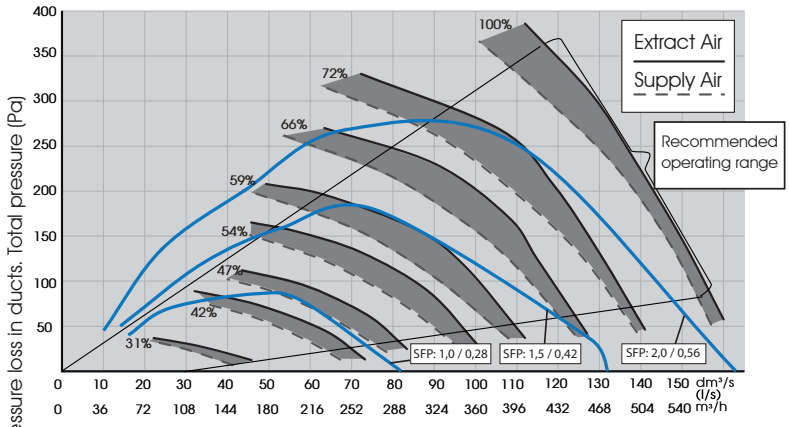


Volume flow rate

SFP rate (Specific Fan Power)
recommended value <2.0 (kW m³/s)

$$SFP = \frac{\text{Input power (total W)}}{\text{Measurement airflow (extract l/s)}}$$

SUPPLY / EXTRACT AIR VOLUMES



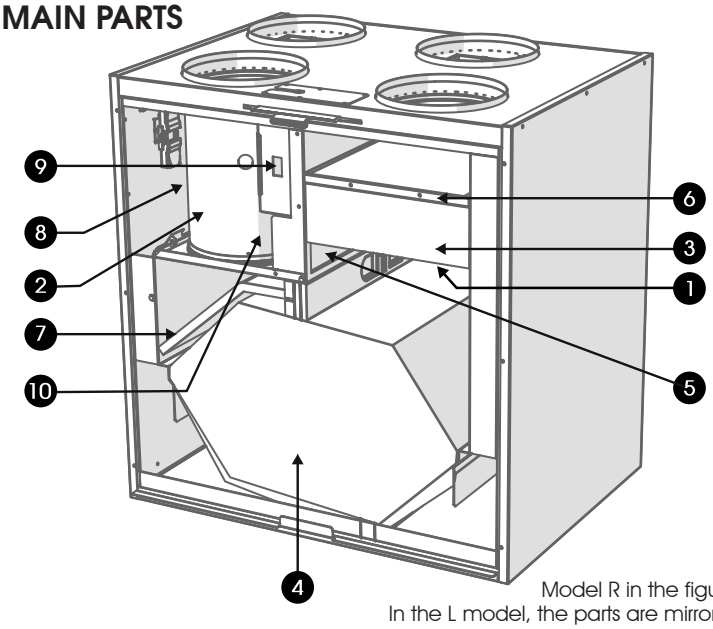
Volume flow rate

SOUND VALUES

		Sound power level in supply air duct (one duct) by octave band L_w, dB								Sound power level in extract air duct (one duct) by octave band L_w, dB							
Adjustment position		31 %	42 %	47 %	54 %	59 %	66 %	72 %	100 %	31 %	42 %	47 %	54 %	59 %	66 %	72 %	100 %
Air flow dm³/s (l/s)		36.2	56.3	67.3	80.7	92.9	105	116	128	40.5	63.8	73.8	87.9	98.8	110	122	136
Air flow m³/h		130.32	202.68	242.28	290.52	334.44	378	417.6	460.8	145.8	229.68	265.68	316.44	355.68	396	439.2	489.6
Medium frequency of the octave band Hz	63	41	50	56	58	59	64	67	69	35	45	49	51	51	56	58	58
	125	45	53	56	59	62	65	68	71	33	43	46	49	49	54	56	59
	250	50	54	57	61	63	66	68	70	24	32	37	40	40	45	47	49
	500	48	53	56	59	60	63	65	68	37	43	46	48	48	52	54	56
	1000	45	54	57	60	62	64	66	67	30	36	39	42	42	46	48	50
	2000	35	46	50	55	58	61	64	66	22	32	34	38	38	43	45	48
	4000	26	41	46	51	54	58	60	63	16	20	22	25	25	31	33	36
	8000	21	32	38	45	49	53	56	59	21	21	21	21	21	24	26	28
L_w dB		54	60	64	67	69	72	74	77	41	49	53	55	57	60	61	63
L_{WA}, dB(A)		49	57	60	63	66	68	70	73	36	42	45	48	50	52	54	56

	Sound pressure level dB (A) coming from the unit through the envelope in the rooms where the unit has been mounted (10m² sound absorption) AIR FLOWS (supply/extract)							
Adjustment position	31%	42%	47%	54%	59%	66%	72%	100%
Air flow dm³/s (l/s)	36/39	56/62	68/74	81/89	92/98	105/113	116/126	131/142
Air flow m³/h	129.6/140.4	201.6/223.2	244.8/266.4	291.6/320.4	331.2/352.8	378/406.8	417.6/453.6	471.6/511.2
L_{pA}, dB (A)	27	34	37	40	42	45	47	50

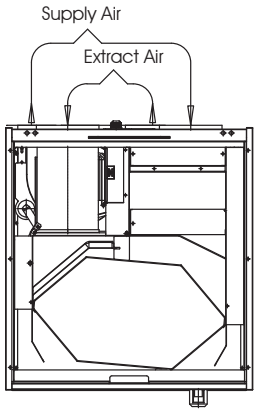
MAIN PARTS



Model R in the figure.
In the L model, the parts are mirrored

1. Extract air fan (behind the protective cover)
2. Supply air fan (behind the extract air duct)
3. Outdoor air filter F7
4. Heat recovery cell
5. Summer / winter flap
6. Outdoor air filter G4
7. Extract air filter G4
8. Post-heating radiator (behind the extract air duct)
9. Safety switch
10. Additional heating radiator (behind the extract air duct)

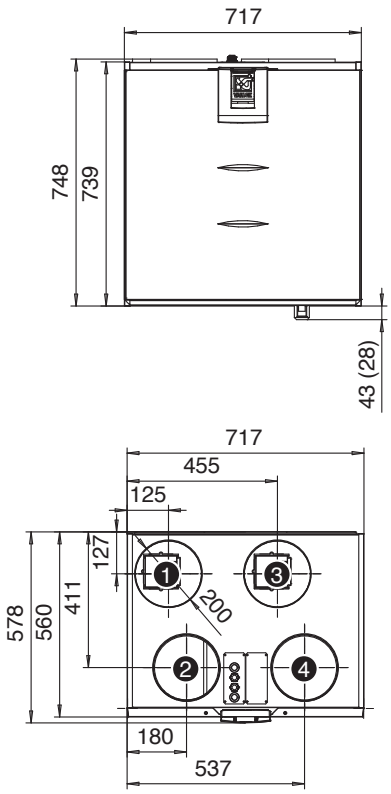
MEASUREMENT POINTS



Measurement points after the connection outlet.
Fan curves indicate the total pressure available for duct losses.

DIMENSIONS AND DUCT OUTLETS

Dimensions



DUCT OUTLETS

Model R

Inner diameter of the female outlet collar ø200 mm

1. Supply air to the apartment
2. Exhaust air from the apartment to the unit
3. Exhaust air out
4. Outdoor air to unit

Model L

Inner diameter of the female outlet collar ø200 mm

1. Exhaust air out
2. Outdoor air to unit
3. Supply air to the apartment
4. Exhaust air from the apartment to the unit

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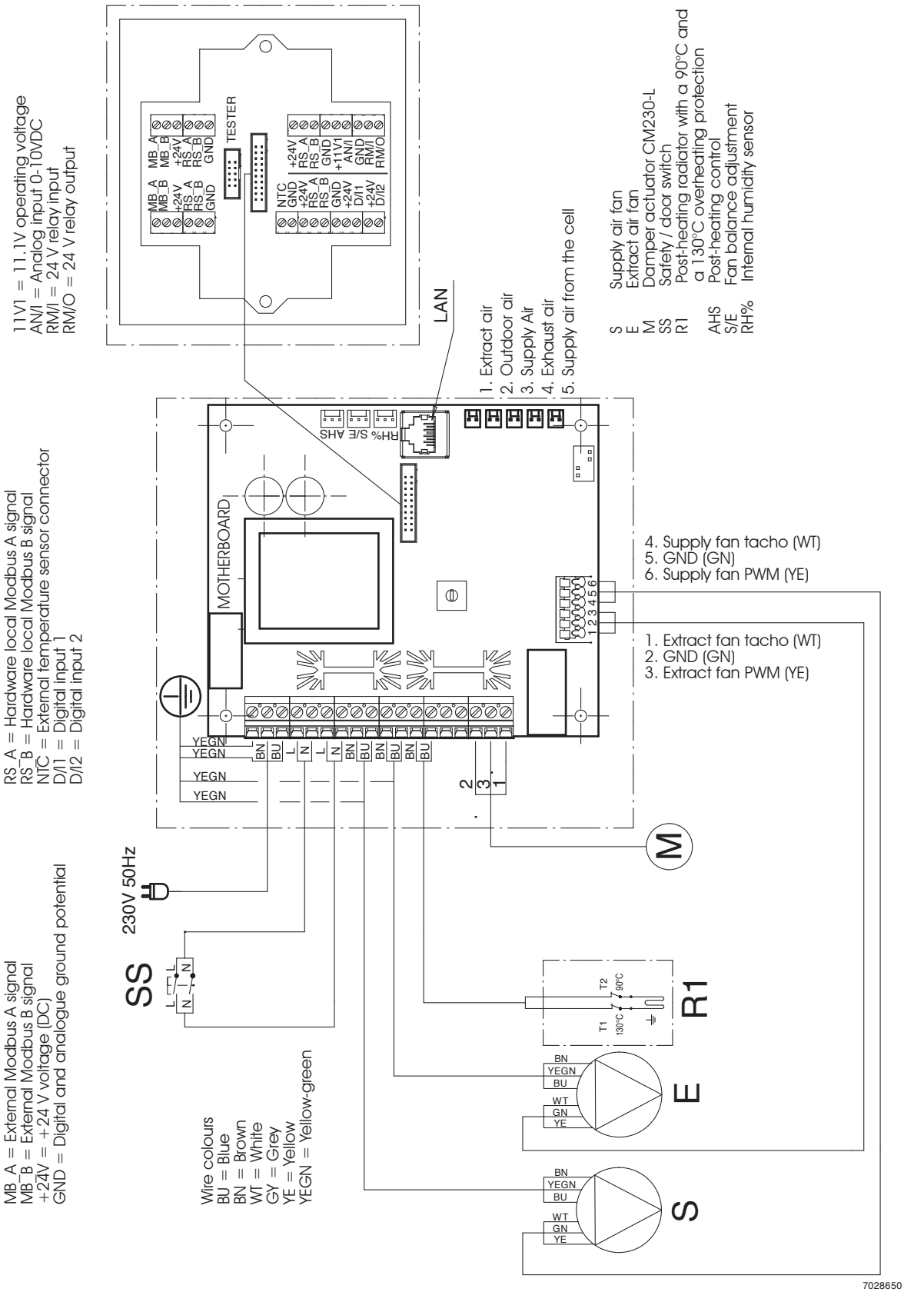
Vallox 096 MV

INTERNAL ELECTRICAL CONNECTION
VALLOX 096 MV

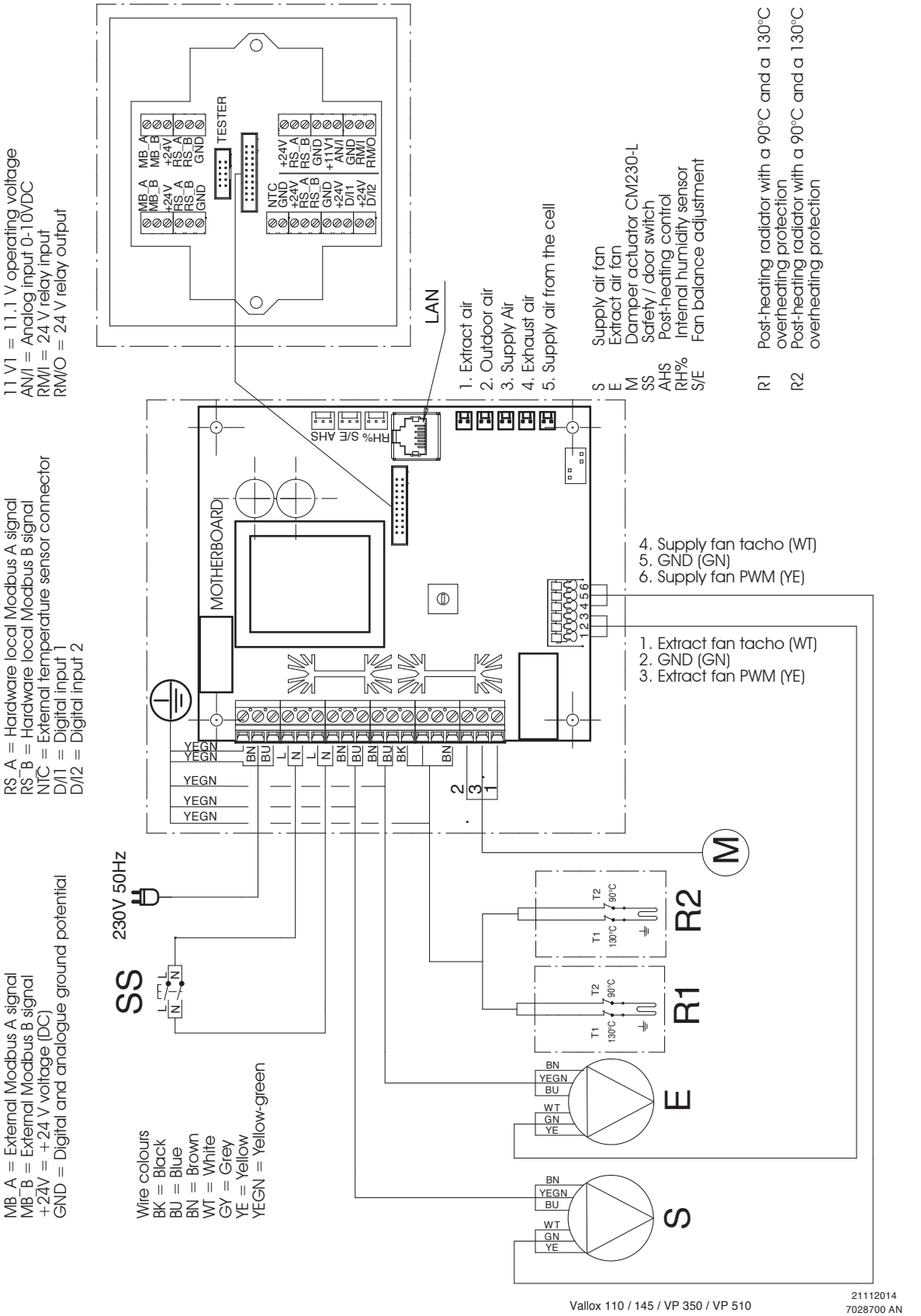


Vallox 096 / VP 270

7028650
21112014 AN

INTERNAL ELECTRICAL CONNECTION
VALLOX 110 MV

Vallox 110 MV


MB_A = External Modbus A signal
MB_B = External Modbus B signal
+24V = +24 V voltage (DC)
GND = Digital and analogue ground potential
RS_A = Hardware local Modbus A signal
RS_B = Hardware local Modbus B signal
NTC = External temperature sensor connector
D/I1 = Digital input 1
D/I2 = Digital input 2
11 V1 = 11.1 V operating voltage
AN/I = Analog input 0-10VDC
RM/I = 24 V relay input
RM/O = 24 V relay output
Wire colours
BK = Black
BU = Blue
BN = Brown
WT = White
GY = Grey
YE = Yellow
YEGN = Yellow-green
MOTHERBOARD
LAN
TESTER
1. Extract air
2. Outdoor air
3. Supply Air
4. Exhaust air
5. Supply air from the cell
S Supply air fan
E Extract air fan
M Damper actuator CM230-L
SS Safety / door switch
AHS Post-heating control
RH% Internal humidity sensor
S/E Fan balance adjustment
R1 Post-heating radiator with a 90°C and a 130°C overheating protection
R2 Post-heating radiator with a 90°C and a 130°C overheating protection
4. Supply fan tacho (WT)
5. GND (GN)
6. Supply fan PWM (YE)
1. Extract fan tacho (WT)
2. GND (GN)
3. Extract fan PWM (YE)
230V 50Hz
SS
R2
R1
E
S
M
Vallox 110 / 145 / VP 350 / VP 510
21112014
7028700 AN

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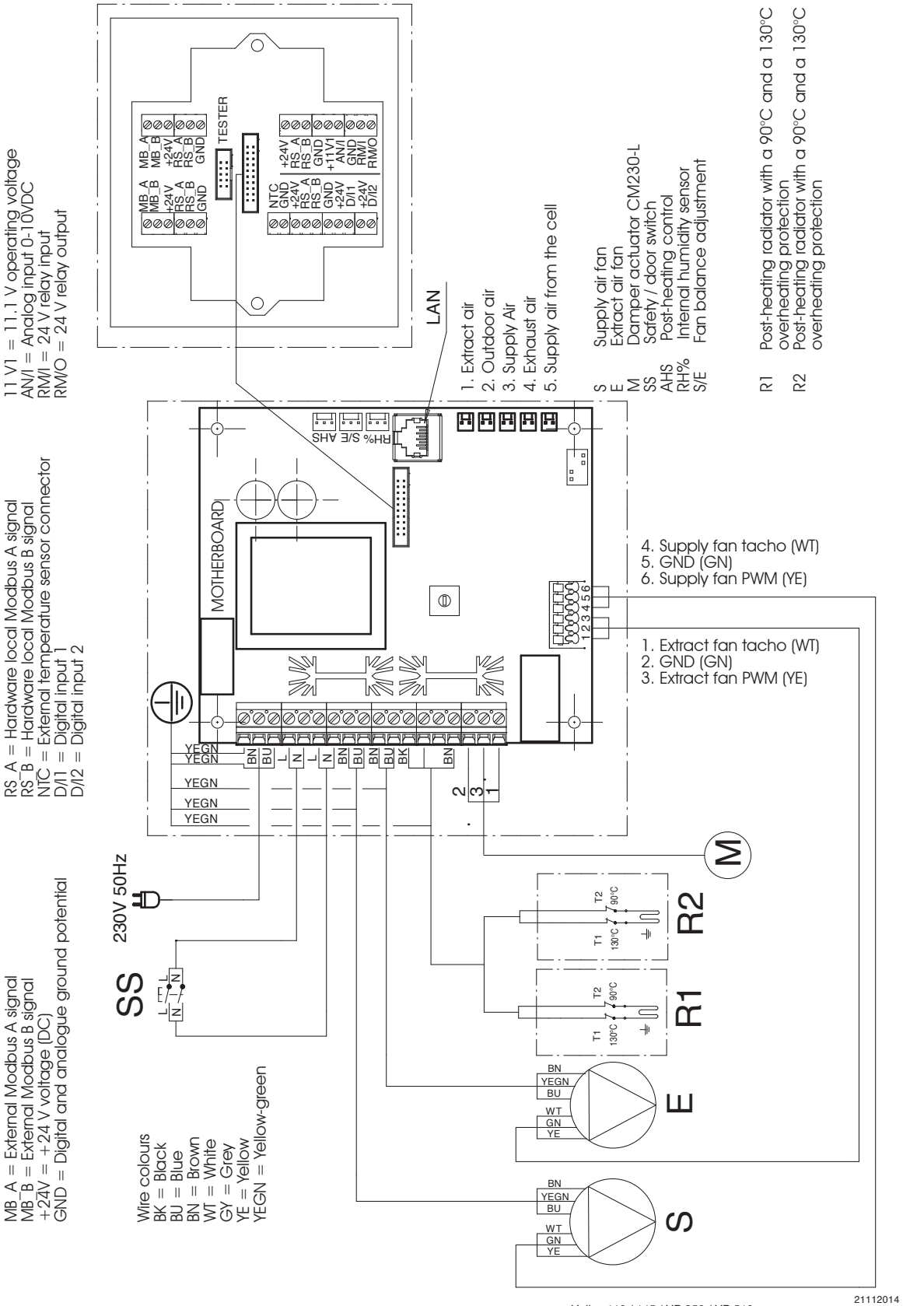
Vallox 145 MV

INTERNAL ELECTRICAL CONNECTION VALLOX 145 MV

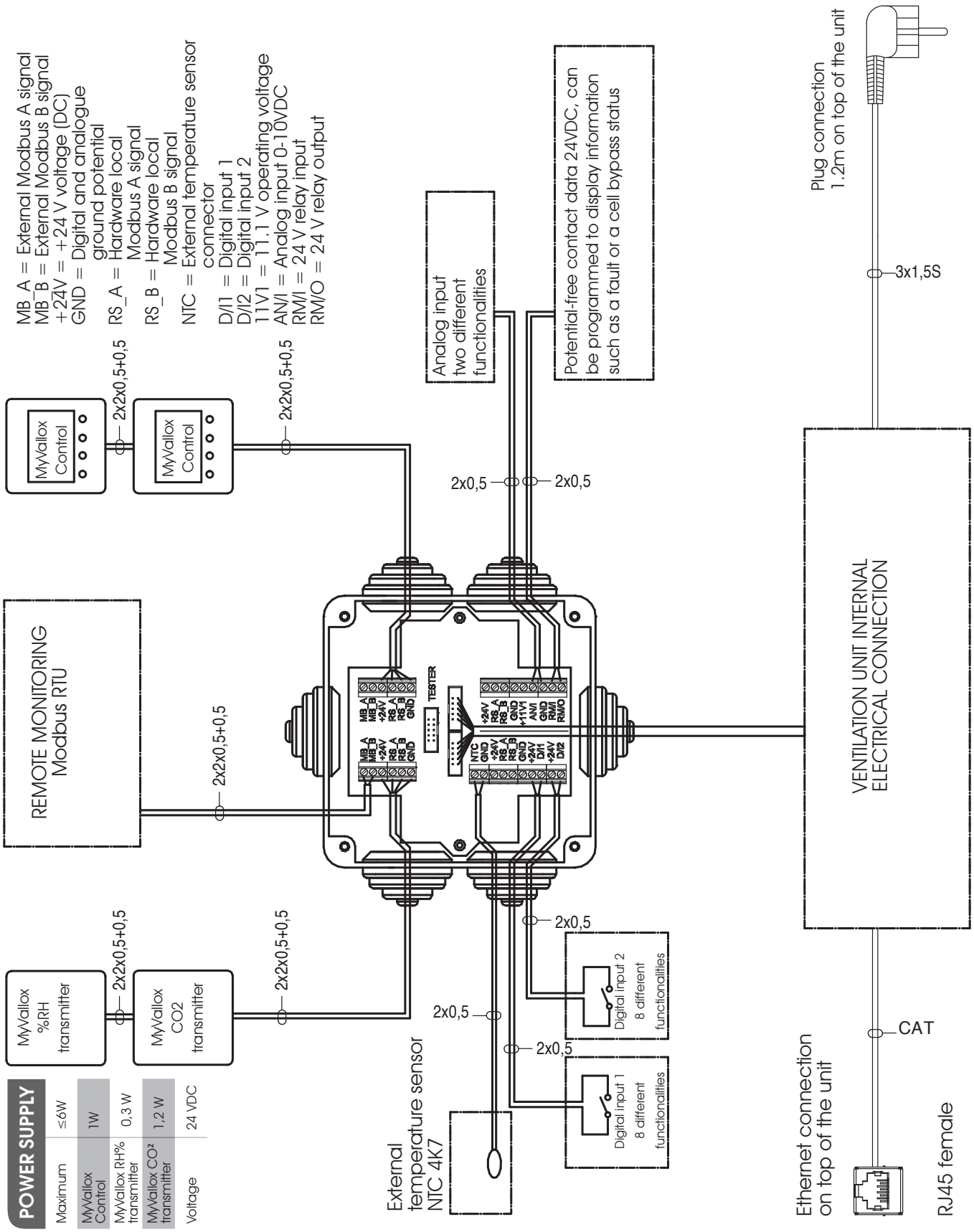


Vallox 110 / 145 / VP 350 / VP 510

21112014
7028700 AN

EXTERNAL ELECTRICAL CONNECTION
VALLOX MV 096, MV 110 AND MV 145

Vallox 145 MV Vallox 110 MV Vallox 096 MV


MB_A = External Modbus A signal
MB_B = External Modbus B signal
+24V = +24 V voltage (DC)
GND = Digital and analogue ground potential
RS_A = Hardware local Modbus A signal
RS_B = Hardware local Modbus B signal
NTC = External temperature sensor connector
D/I1 = Digital input 1
D/I2 = Digital input 2
11V1 = 11.1 V operating voltage
AN/I = Analog input 0-10VDC
RM/I = 24 V relay input
RM/O = 24 V relay output
Plug connection 1.2m on top of the unit
3x1,5S
Analog input two different functionalities
Potential-free contact data 24VDC, can be programmed to display information such as a fault or a cell bypass status
MyVallox Control
2x2x0,5+0,5
2x0,5
REMOTE MONITORING Modbus RTU
VENTILATION UNIT INTERNAL ELECTRICAL CONNECTION
MyVallox %RH transmitter
MyVallox CO2 transmitter
Digital input 2 8 different functionalities
Digital input 1 8 different functionalities
External temperature sensor NTC 4K7
CAT
Ethernet connection on top of the unit
RJ45 female
POWER SUPPLY
Maximum ≤6W
MyVallox Control 1W
MyVallox RH% transmitter 0,3 W
MyVallox CO² transmitter 1,2 W
Voltage 24 VDC

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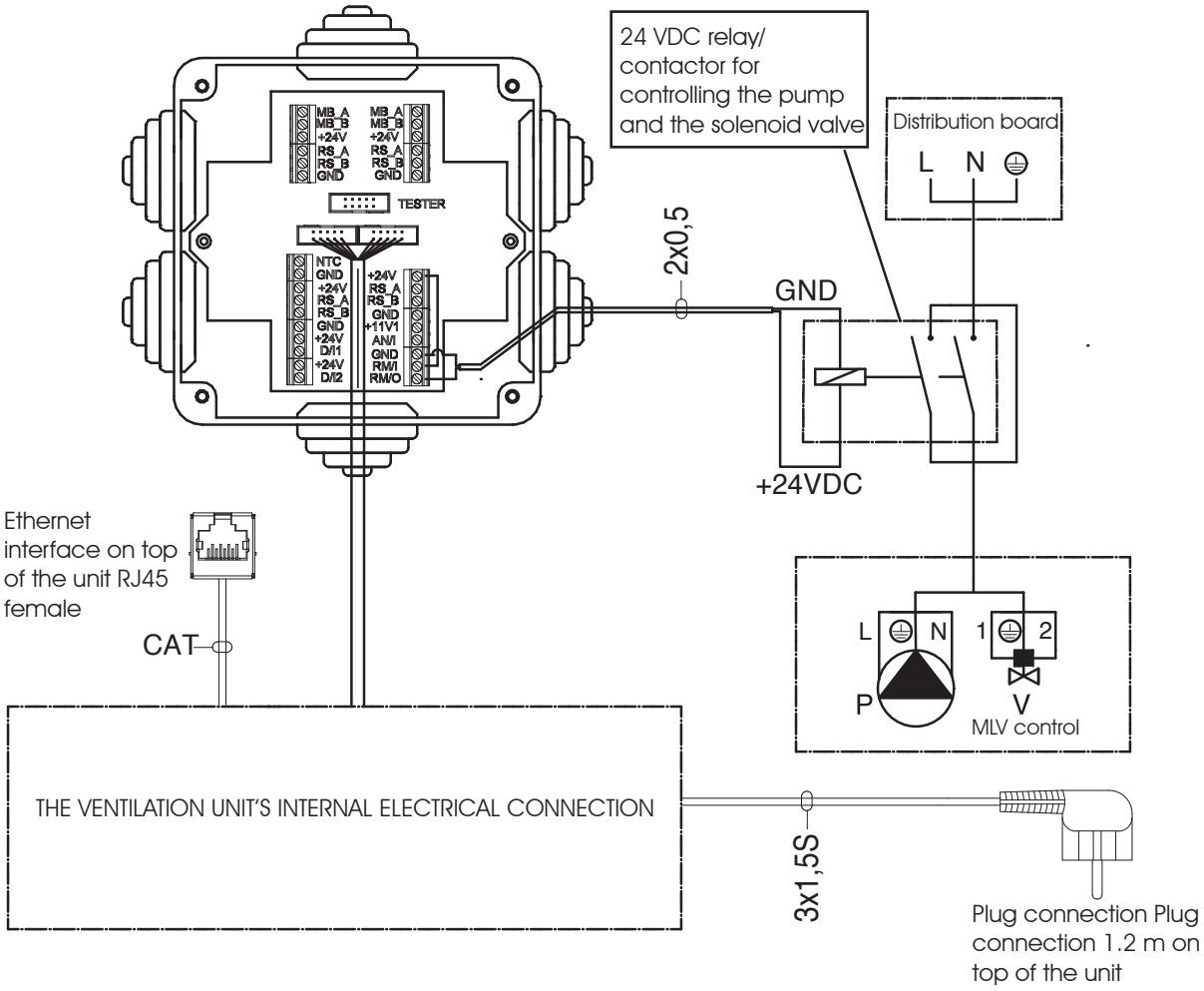
Vallox 096 MV Vallox 110 MV Vallox 145 MV

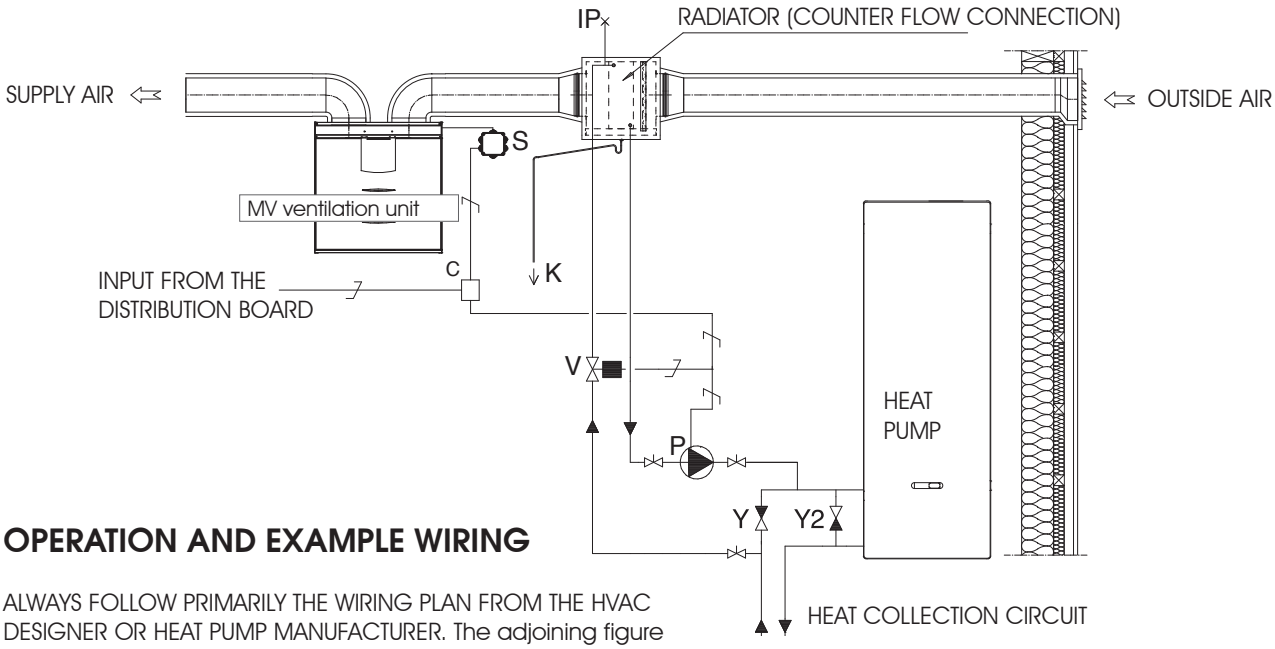
EXTERNAL ELECTRICAL CONNECTION FOR CONTROLLING THE MLV


24 VDC relay/ contactor for controlling the pump and the solenoid valve
Distribution board
L N
MB_A MB_B +24V RS_A RS_B GND
TESTER
NTC GND +24V RS_A RS_B GND +24V D/I1 +24V D/I2
+24V RS_A RS_B GND +11V1 AN/I GND RM/I RM/O
2x0,5
GND
+24VDC
Ethernet interface on top of the unit RJ45 female
CAT
L N 1 2
P
V
MLV control
THE VENTILATION UNIT'S INTERNAL ELECTRICAL CONNECTION
3x1,5S
Plug connection Plug connection 1.2 m on top of the unit

MB_A	External Modbus A signal
MB_B	External Modbus B signal
+24V	+24V direct current voltage (DC)
GND	Digital and analog ground potential
RS_A	Hardware local Modbus A signal
RS_B	Hardware local Modbus B signal
NTC	External temperature sensor connector
D/I1	Digital input 1
D/I2	Digital input 2
11V1	11,1V volt operating voltage
AN/I	Analog input 0-10Vdc
RM/I	24V relay input
RM/O	24V relay output
P	Circulation pump
V	Solenoid valve

HEATING/COOLING RADIATOR OPERATION CHART

Vallox 145 MV Vallox 110 MV Vallox 096 MV



OPERATION AND EXAMPLE WIRING

ALWAYS FOLLOW PRIMARILY THE WIRING PLAN FROM THE HVAC DESIGNER OR HEAT PUMP MANUFACTURER. The adjoining figure depicts an example wiring for connecting the heating/cooling radiator unit to the heat collection circuit.

Connect the radiator output pipe to the heat collection circuit return pipe. Direct the fluid returning from the radiator unit to the heat collection circuit return pipe.

If you know that the internal pressure losses in the heat pump of the heat collection circuit are large, we recommend by-passing the heat pump. In this case, the fluid circuit operates when the heat pump is at a standstill. In this case, the pressure loss at the one-way bypass valve Y2 must be less than the pressure loss at the heat pump.

P	Circulation pump. Not included in the delivery. The pump should be suitable for pumping liquid colder than the environment, due to condensing (for example, Grundfos Magna 1 25-80).
V	Solenoid valve. Not included in the delivery. The valve must be suitable for the heat collection circuit fluid (for example, ELV05006, Stig Wahlström).
K	Condensing water tube. Not included in the delivery.
IP	De-aerater. Not included in the delivery.
S	External electrical junction box for the MV.
C	24 VDC relay/contactor for controlling the pump and the solenoid valve. Not included in the delivery. (for example, ABB CR-P024DC2)
Y	One-way valve. Not included in the delivery.
Y2	One-way valve. Not included in the delivery. The pressure loss must be less than the pressure loss of the heat pump.

NOTE: HEATING

The pump starts when the outside air temperature drops below the winter limit value set at the factory (-5 °C).

NOTE: COOLING

The supply air setpoint value for the active profile (for example, At home) controls the pump start-up.

NOTE

Due to the risk of humidity damage, the supply air temperature must not fall below 16 ... 20 °C in a duct that has not been insulated for condensation.

NOTE

When selecting the relay, pay attention to the maximum allowed common power supply (6W) of the circuit card in the external connection box, if the relay power is obtained from the circuit card +24V connector.

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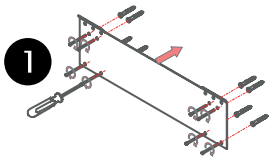
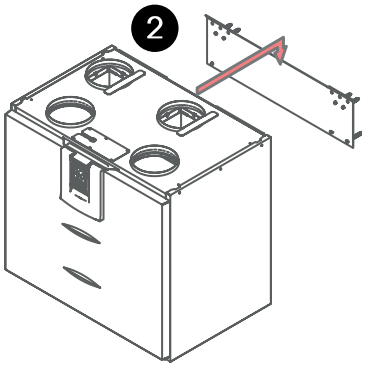
WALL MOUNTING





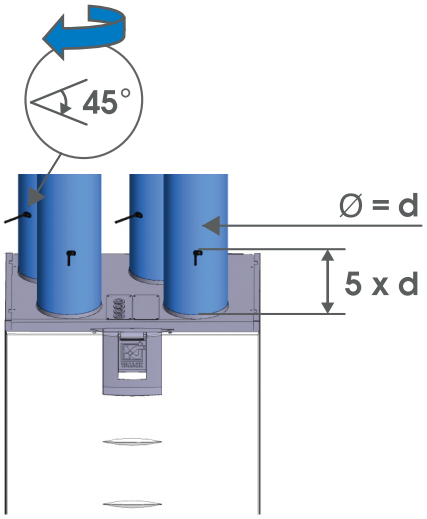
Note the following before mounting:

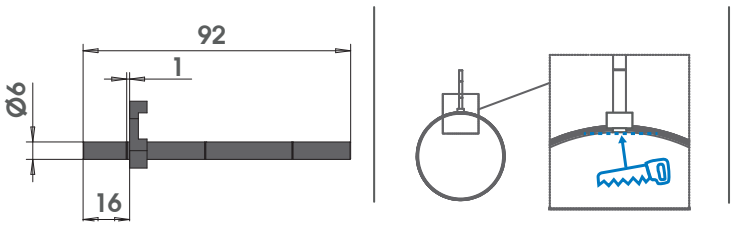
- Mount the Vallox 096 MV / 110 MV in a place where the temperature does not fall below +10°C.
- Avoid mounting the unit on a hollow, echoing partition wall or on a bedroom wall, or prevent the conduction of sound.
- The minimum distance between the top of the unit and the finished ceiling surface is 30 mm. Note that the unit rises during mounting 10 mm higher than the final height.
- Without protective closure, the unit must be located in a place where the noise does not disturb anyone (storage, technical rooms, etc.).

Mount the Vallox 096 MV / 110 MV on the wall with a mounting plate, as shown in the adjacent figure. Make sure that the unit is horizontally level after mounting.

MEASURING TUBES

The accessory bag delivered with the unit includes 4 airflow measuring tubes. You can mount these tubes on the ducts to make ventilation adjustment easier.





NOTE

Mount 145 MV on the floor rack, or on the wall with a mounting plate.

CEILING MOUNTING BY USING THE CEILING MOUNTING PLATE

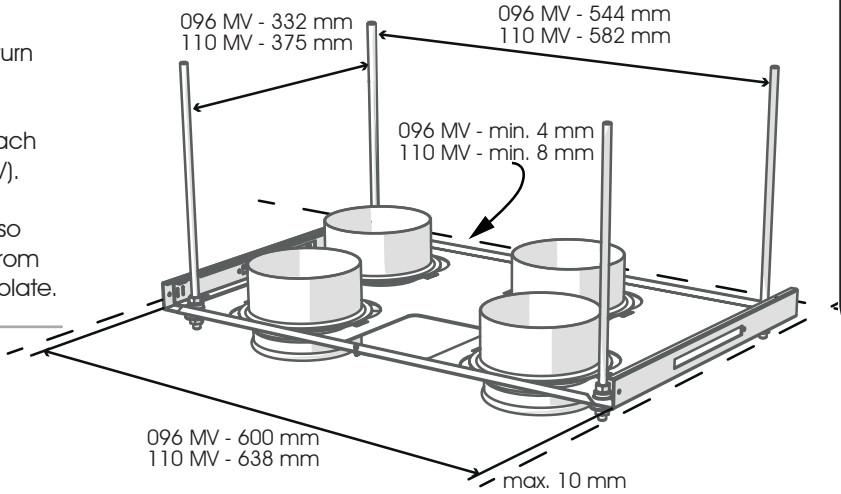
Models 096 MV and 110 MV can be equipped with an optional ceiling mount plate. Attach the ceiling mounting plate:

- To the ceiling with M8 thread bars so that they stand the weight of the unit.
- Horizontally level, as the plate determines the straightness of the unit.

Insulate the outdoor air and exhaust air duct against condensation also between the unit and the ceiling mounting plate.

MOUNTING THE CEILING MOUNTING PLATE

1. Attach the thread bars to the ceiling and turn the nuts to the bars.
2. Lift the ceiling mounting plate in place.
3. Push a rubber damper and a washer to each thread bar to the cup of the plate (096 MV).
4. Turn the nut.
5. Shorten the lower ends of the thread bars so that they will be at no more than 10 mm from the lower surface of the ceiling mounting plate.

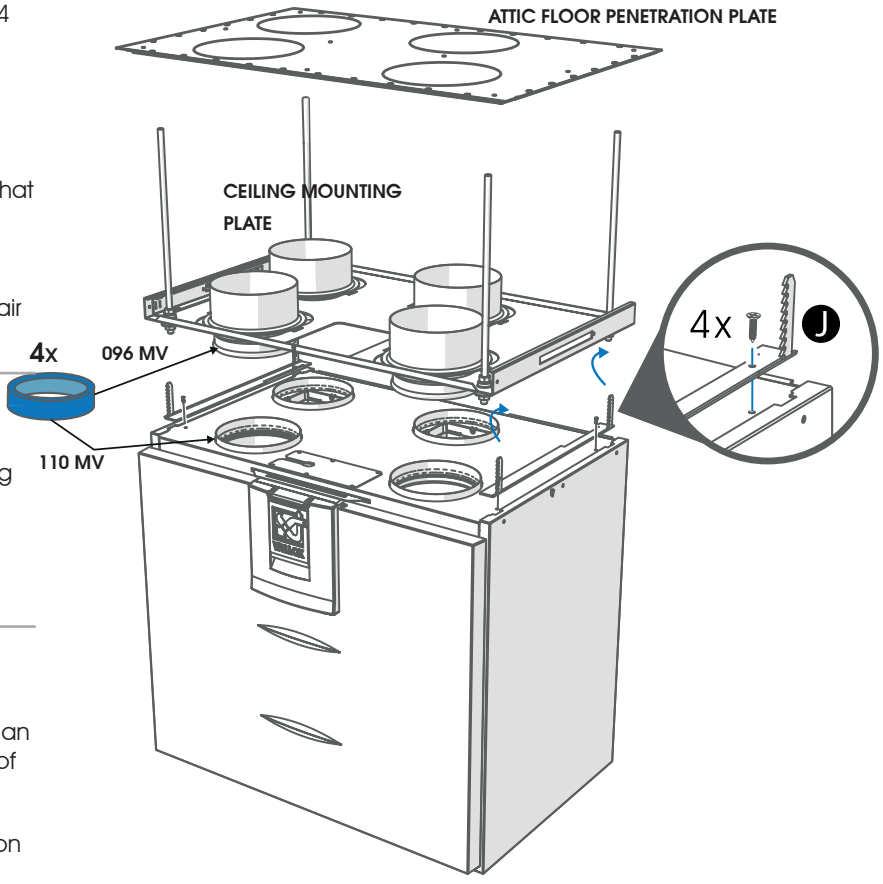


WARNING

The machine is very heavy. Do not perform this procedure alone.

MOUNTING THE VENTILATION UNIT TO THE CEILING MOUNTING PLATE

1. Mount the locking washers (J) delivered with the ceiling mounting plate in place with the 4 screws.
2. Lift the unit and take the wires through the opening in the ceiling mounting plate.
3. Put the locking devices to the top of the ventilation unit at the openings in the ceiling mounting plate and lift upwards. Make sure that the unit is locked in place.
4. Check that the condensing water insulation between the unit and the ceiling mounting plate is in place in the exhaust and outdoor air duct.



TIP

You can detach the unit from the ceiling mounting plate by pulling the spring-loaded moulding to the direction shown by the arrow (more detailed information provided with the ceiling mounting plate).

ATTIC FLOOR PENETRATION PLATE

The attic floor penetration plate is optional. When an attic floor penetration plate is used, the tightness of the vapour barrier has to be ensured.

The minimum distance of the attic floor penetration plate from the rear wall is 5 mm. The minimum distance of the attic floor penetration plate from the side walls is 15 mm.

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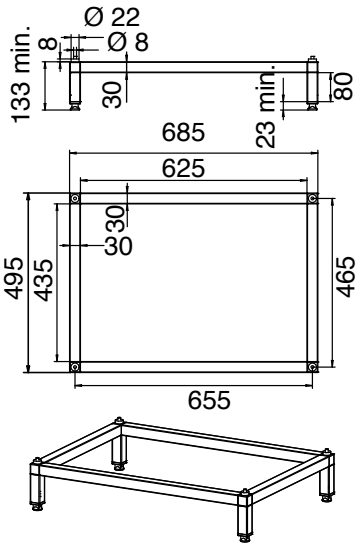
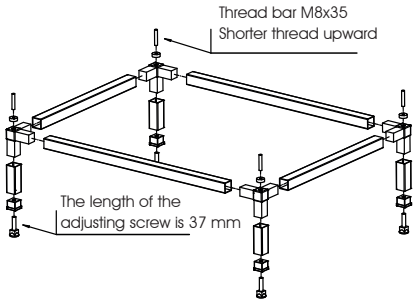
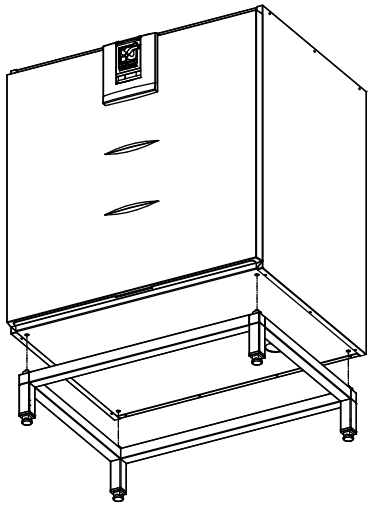
VALLOX 145 MV BASE

The base is optional. Adjust the base with adjusting legs to make it straight. Remove the (4) rubber plugs at the bottom of the unit. Place the unit on top of the base so that the bars of the base fit in the holes at the bottom of the unit.

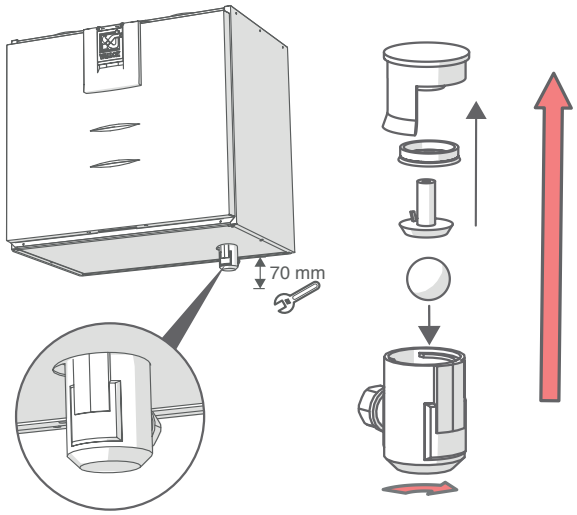






CONDENSING WATER

In the heating season, the extract air humidity condenses to water. Water formation may be abundant in new buildings, or if the ventilation is low, compared to the humidity production of residents. Condensed water must be able to get out of the unit without obstruction. Check in conjunction with maintenance, for example, during the autumn before the heating season begins, that the condensing water outlet on the bottom pool is not clogged and that there is no leakage. You can check it by pouring a little water into the pool. Clean, if necessary. Water must not be allowed to enter the electrical system.



MOUNTING THE CONDENSING WATER OUTLET

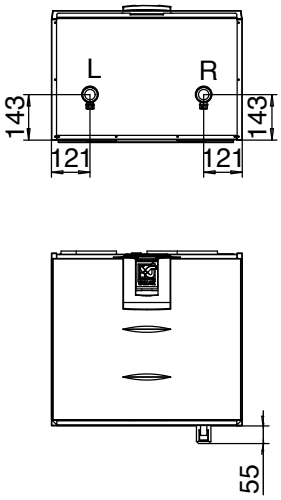
1. Push the main body of the condensing water outlet from above through the hole at the bottom plate of the ventilation device.
2. Push the tightening pin from below to the main body.
3. Place the valve ball in the main body of the condensing water outlet.
4. Attach the housing to the condensing water outlet.

NOTE

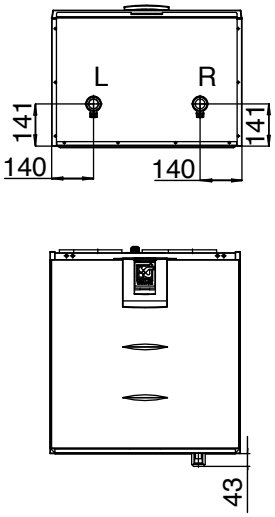
The standard SilentKlick condensing water outlet installation requires 70mm of free space below the ventilation unit.

CONDENSING WATER DIMENSIONING FIGURES

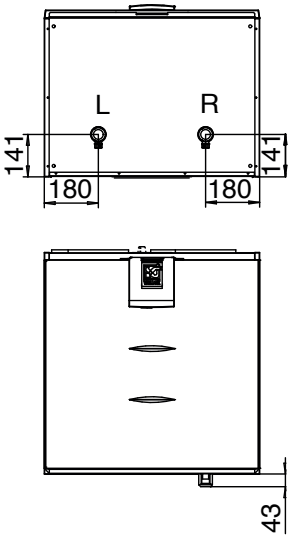
096 MV



110 MV



145 MV



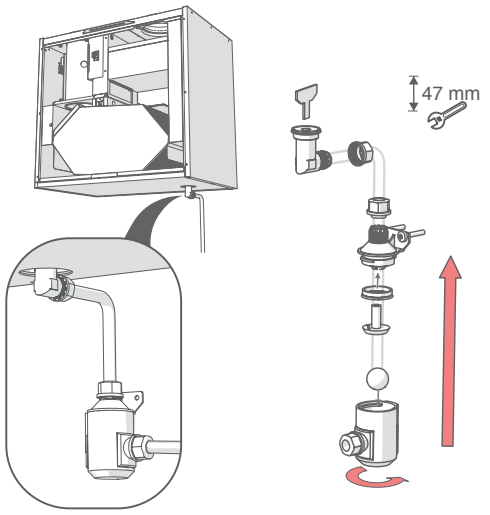
ALTERNATIVE WATER SEAL, WHICH CAN BE INSTALLED IN LOW SPACES

NOTE

If you use the alternative condensing water outlet, move the gasket ring and the locking part to the tube joint part that will be mounted on the wall.

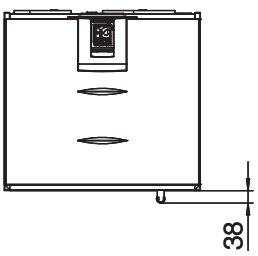
NOTE

The alternative condensing water outlet installation requires 47mm of free space below the ventilation unit.

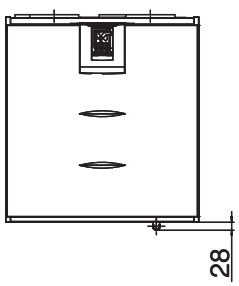


ALTERNATIVE WATER SEAL, DIMENSIONING FIGURES

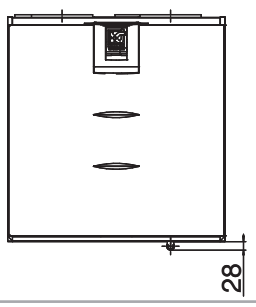
096 MV



110 MV



145 MV



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VALLOX

DECLARATION OF CONFORMITY

Manufacturer	Vallox Oy
Address	Myllykyläntie 9-11, FIN-32200 LOIMAA, FINLAND
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Fax	+358 10 7732 201
The person who compiles the technical file	Petri Koivunen Vallox Oy Myllykyläntie 9-11, FIN-32200 LOIMAA, FINLAND Tel. +358 10 7732 234 Fax +358 10 7732 201 Email petri.koivunen@vallox.com
Description of unit	Ventilation unit with heat recovery
Model	Vallox 096 MC R, Vallox 096 MC L, Vallox 096 SE R, Vallox 096 SE L, Vallox 096 MV R, Vallox 096 MV L, ValloPlus 270 SE R, ValloPlus 270 SE L,ValloPlus 270 MV R, ValloPlus 270 MV L, Vallox 110 SE R, Vallox 110 SE L, Vallox 110 MV R, Vallox 110 MV L, ValloPlus 350 SE R, ValloPlus 350 SE L, ValloPlus 350 MV R, ValloPlus 350 MV L, Vallox 145 SE R, Vallox 145 SE L, Vallox 145 MV R, Vallox 145 MV L, ValloPlus 510 SE R, ValloPlus 510 SE L, ValloPlus 510 MV R, ValloPlus 510 MV L

Declares that the ventilation unit for supply and extract air, equipped with heat recovery and operating as part of a ventilation system has been designed and manufactured to the following specificatons:

1. Low Voltage Directive (2006/95/EC) – EN 60335-1:2012
2. EMC Directive (2004/108/EC) – EN 61000-6-1:2007, EN 61000-3-2:2006 + A1:2009 + A2:2009, EN 61000-3-3:2008, EN 61000-6-3:2007 + A1:2011

This is the original Declaration of Conformity

Loimaa, 23rd January 2015

Jukka-Pekka Korja
Managing Director

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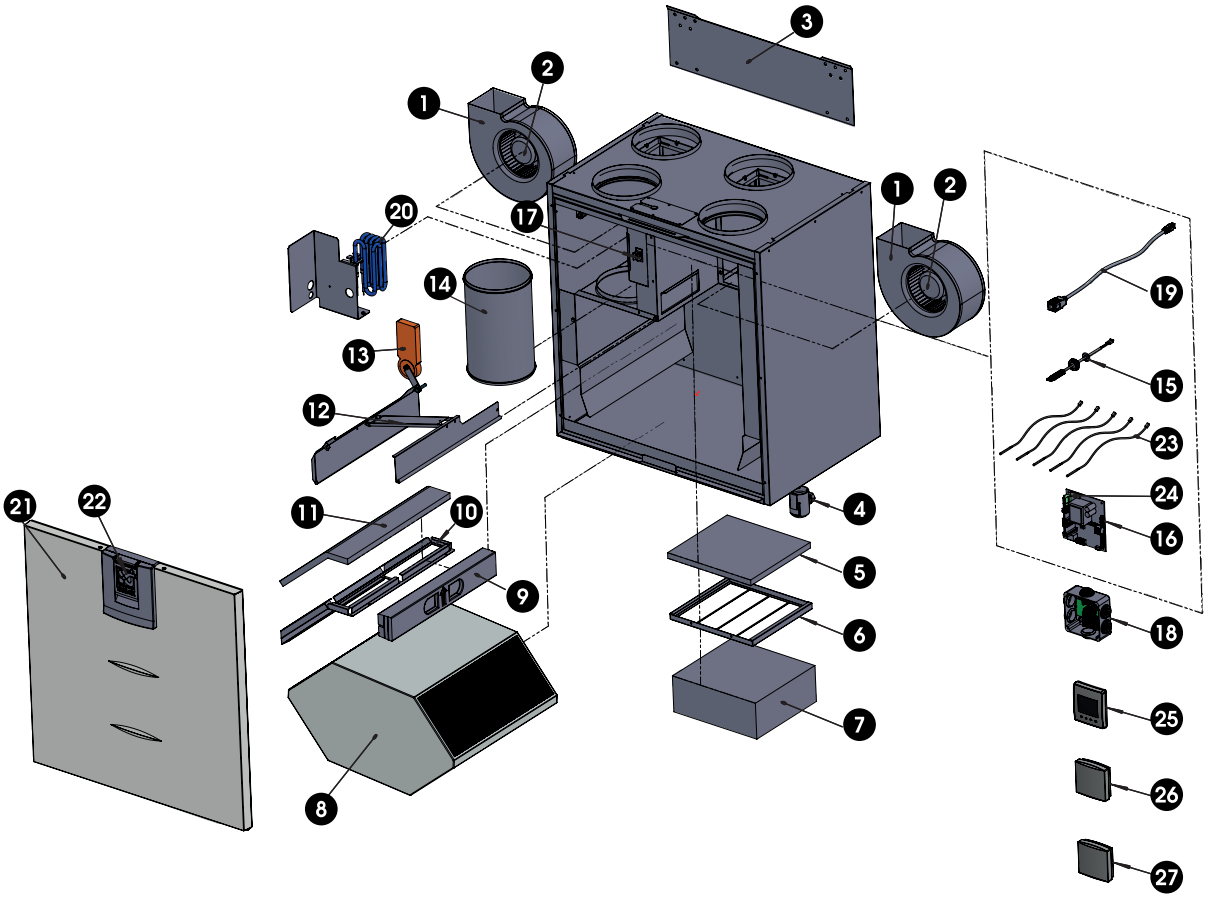
EXPLODED VIEW AND PARTS LIST
VALLOX 096 MV

Vallox 096MV



NO.	PART	CODE	NO.	PART	CODE	NO.	PART	CODE
1.	Fan assembly	1108800	12.	The bypass duct assembly		20.	Post-heater 900W	
2.	Fan motor	935365		R model unit	3491200		R model unit	942210
3.	Wall mounting plate	3080700		L model unit	3491201		L model unit	942211
4.	Water seal	3292500	13.	Damper motor	930620	21.	Door assembly	3475200
5.	G4 coarse filter	978044	14.	Extract air outlet	985026	22.	Door latch assembly	3355900
6.	Filter stand	3464400	15.	Internal humidity sensor	946148	23.	NTC sensor kit	3480500
7.	F7 filter	978220	16.	Motherboard	949032	24.	Glass tube fuse 5x20	952484
8.	HR cell	933260	17.	Safety switch	948377		80mA, slow	
9.	Upp support for HR cell	3467200	18.	Connection box	3526700	25.	Control panel	949033
10.	Filter stand	3464500	19.	RJ45 extension cable	952196	26.	Humidity sensor (optional)	946149
11.	G4 coarse filter	978045				27.	Carbon dioxide sensor (option)	949111

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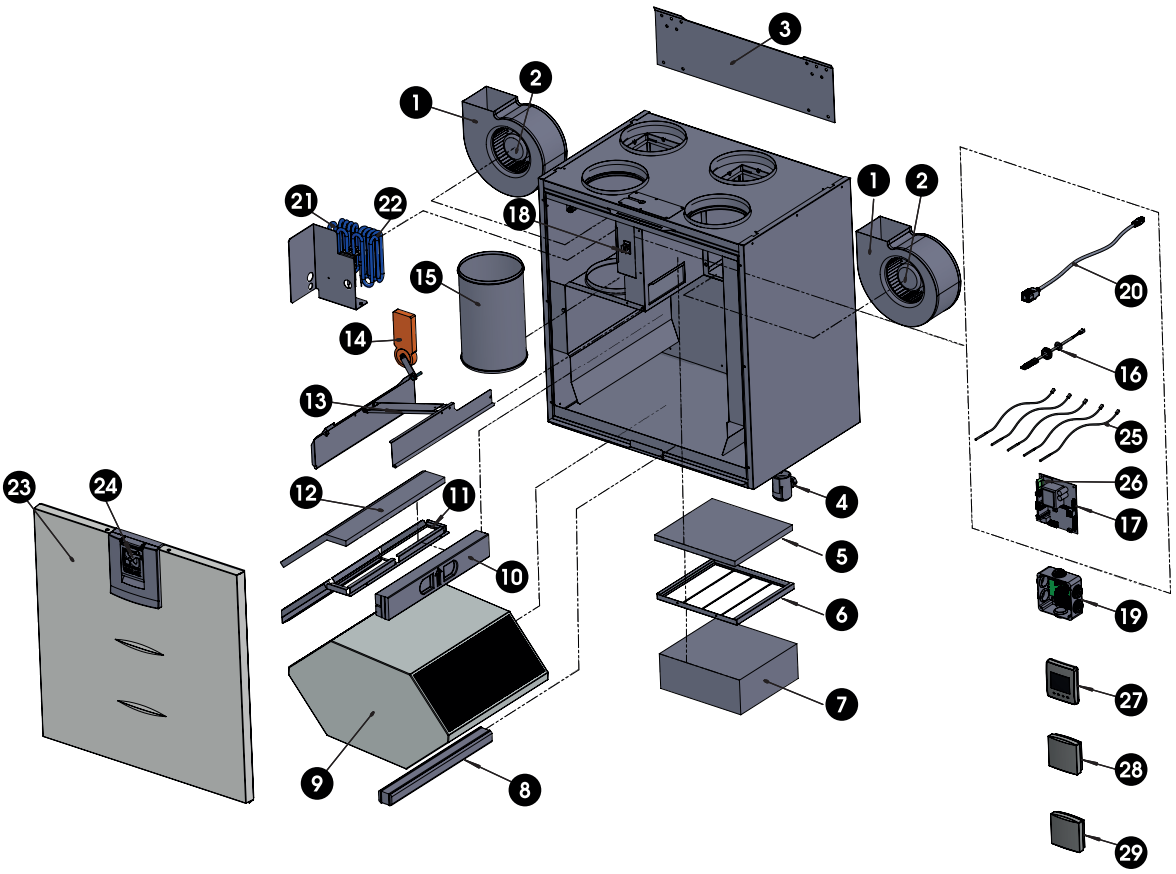
Vallox 110 MV

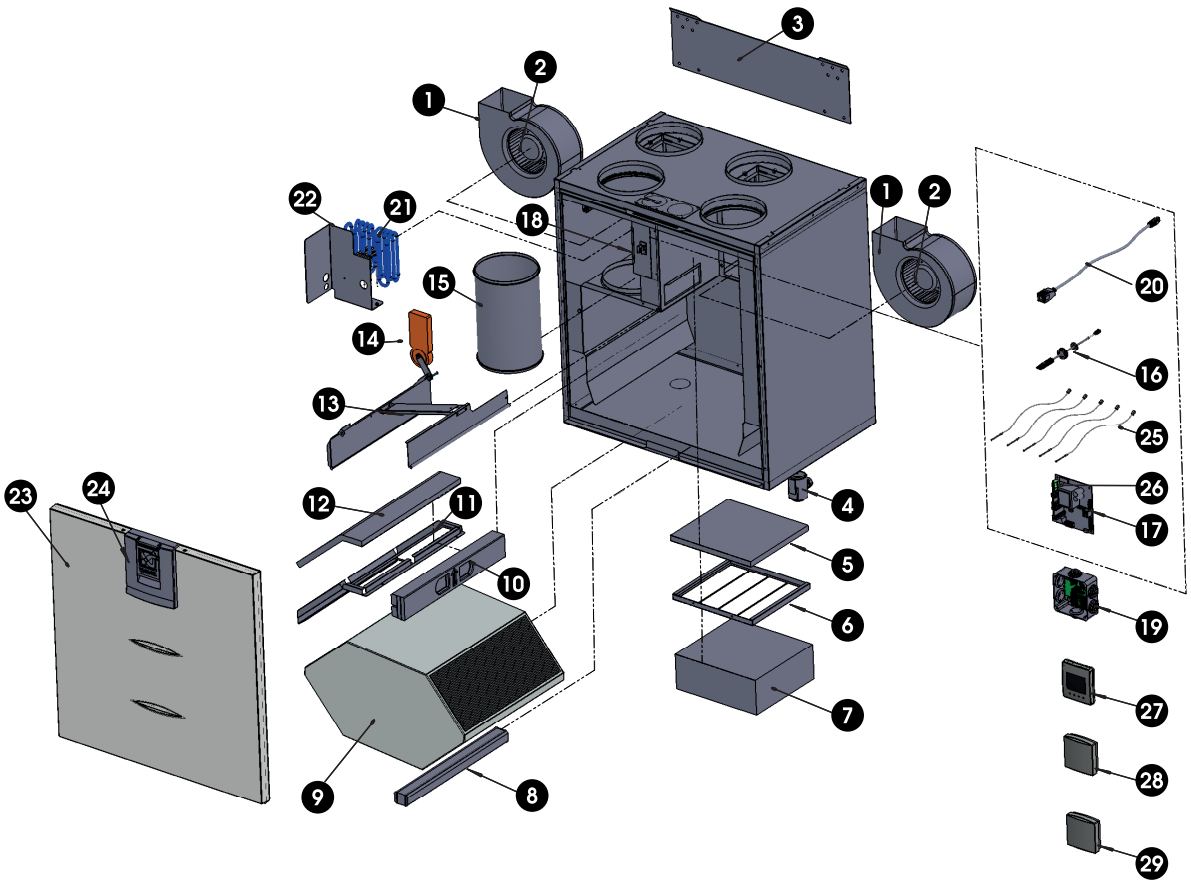
EXPLODED VIEW AND PARTS LIST VALLOX 110 MV



NO.	PART	CODE	NO.	PART	CODE	NO.	PART	CODE
1.	Fan assembly	1108800	13.	The bypass duct assembly		22.	Additional heater 900W	
2.	Fan motor	935365		R model unit	3447200		R model unit	942210
3.	Wall mounting plate	3080700		L model unit	3447201		L model unit	942211
4.	Water seal	3292500	14.	Damper motor	930620	23.	Door assembly	3447300
5.	G4 coarse filter	978042	15.	Extract air outlet	985025	24.	Door latch assembly	3355900
6.	Filter stand	3454000	16.	Internal humidity sensor	946148	25.	NTC sensor kit	3457900
7.	F7 filter	978157	17.	Motherboard	949032	26.	Glass tube fuse 5x20	952484
8.	Lower support for HR cell	3450100	18.	Safety switch	948377		80mA, slow	
9.	HR cell	933160	19.	Connection box	3526700	27.	Control panel	949033
10.	Upp support for HR cell	3426600	20.	RJ45 extension cable	952196	28.	Humidity sensor (optional)	946149
11.	Filter stand	3426800	21.	Post-heater 900W		29.	Carbon dioxide sensor	949111
12.	G4 coarse filter	978043		R model unit	942211		(optional)	
				L model unit	942210			

EXPLODED VIEW AND PARTS LIST
VALLOX 145 MV

Vallox 145 MV



NO.	PART	CODE	NO.	PART	CODE	NO.	PART	CODE
1.	Fan assembly	1109200	13.	The bypass duct assembly		22	Post-heater 900W	
2.	Fan motor	935285		R model unit	3475900		R model unit	942211
3.	Wall mounting plate	3482100		L model unit	3475901		L model unit	942210
4.	Water seal	3292500	14.	Damper motor	930620	23	Door assembly	3476000
5.	G4 coarse filter	978046	15.	Extract air outlet	985035	24	Door latch assembly	3355900
6.	Filter stand	3466600	16.	Internal humidity sensor	946148	25	NTC sensor kit	3482300
7.	F7 filter	978158	17.	Motherboard	949032	26	Glass tube fuse 5x20	952484
8.	Lower support for HR cell	3469000	18.	Safety switch	948377		80mA, slow	
9.	HR cell	933270	19.	Connection box	3526700	27	Control panel	949033
10.	Upp support for HR cell	3468900	20.	RJ45 extension cable	952196	28	Humidity sensor (optional)	946149
11.	Filter stand	3466500	21.	Additional heater 1500W	942220	29	Carbon dioxide sensor (option)	949111
12.	G4 coarse filter	978047						

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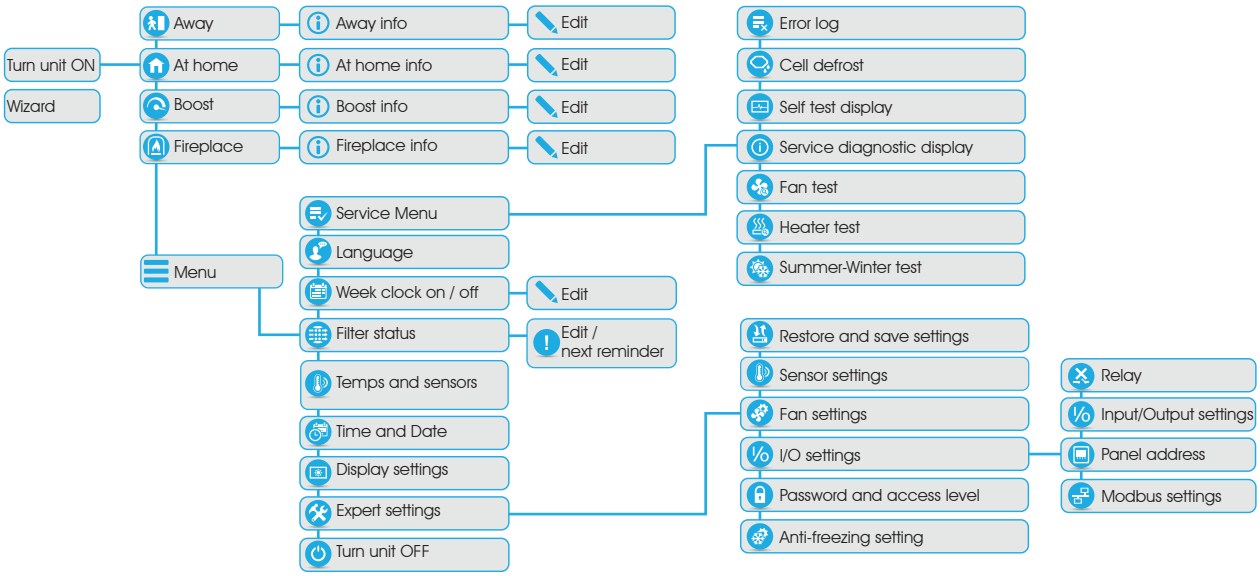
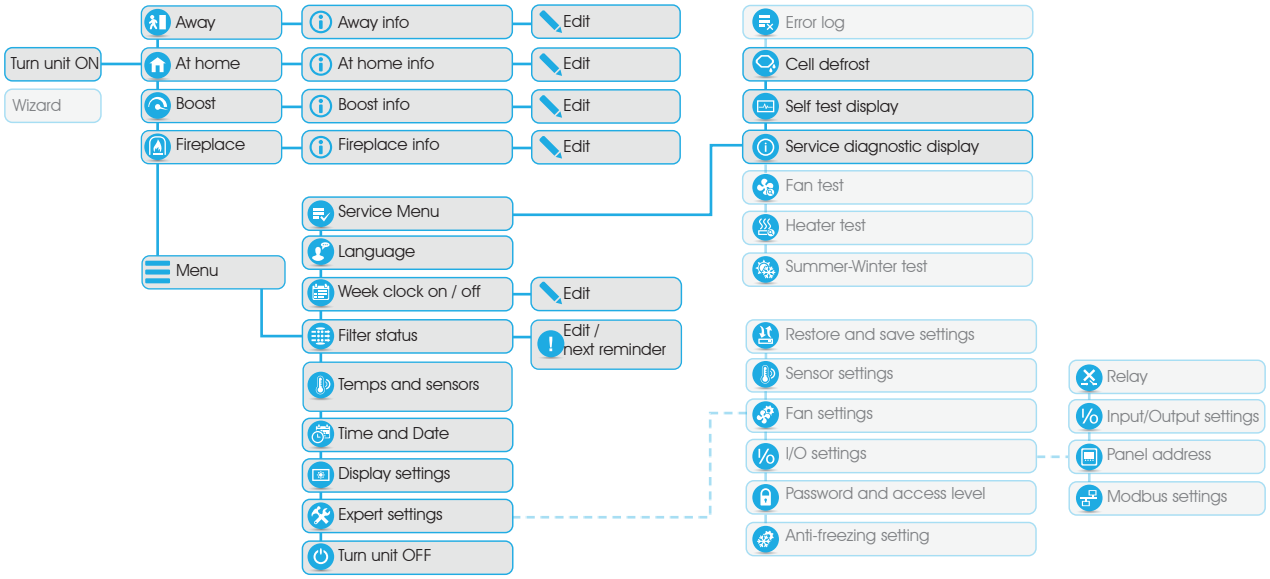
EXTENSIVE



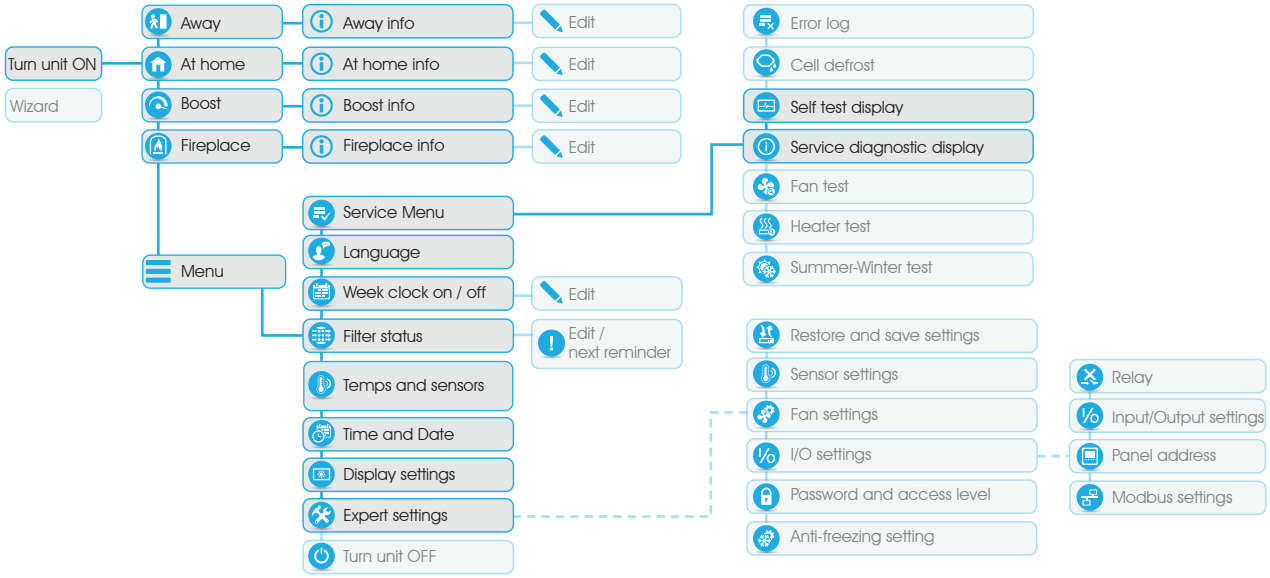
NORMAL



USER LEVEL DIAGRAMS

Vallox 145 MV Vallox 110 MV Vallox 096 MV

LIMITED



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MANUAL

Vallox 096MV Vallox 110MV Vallox 145MV

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